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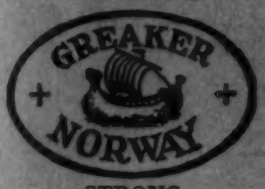

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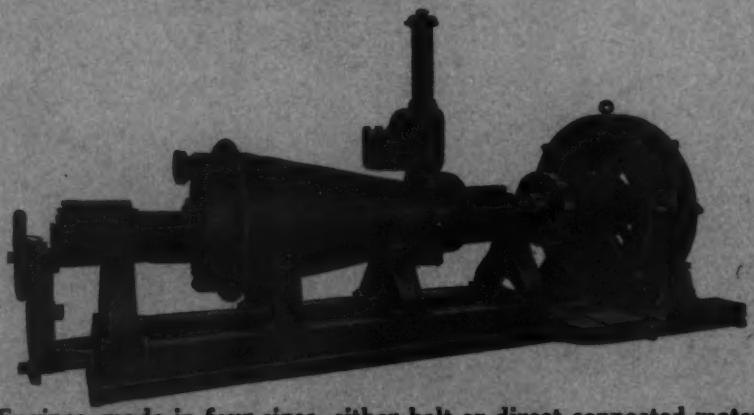

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PAPER TRADE JOURNAL

Vol. LXXVIII No. 8 NEW YORK AND CHICAGO Thursday, February 21, 1924

DATES ANNOUNCED FOR A. P. & P. A. CONVENTION

Formal Call Issued for Forty-Seventh Annual Meeting of the American Paper and Pulp Association in New York From April 8 to 10—All of the Most Important Meetings as Usual Are Scheduled for the Waldorf-Astoria—Second Paper Industries Exposition Will Be Held All During the Week Beginning April 7 at the Grand Central Palace

The formal call for the Forty-Seventh Annual Convention of the American Paper and Pulp Association was sent out to the members last week, the dates announced being April 8 to 10 inclusive.

In general the program of the week will be as in other years. Tuesday, April 8 will be devoted, in addition to meetings of group associations representing manufacturers of the various grades of paper, to the Salesmen's Association.

The group meetings of manufacturing associations will be continued on Wednesday, together with the Woodlands Section convention of the central organization.

Thursday, April 10, will be devoted to the convention sessions and the banquet of the American Paper and Pulp Association.

There will be a radical change in program for the Association banquet, in that instead of political notables of national renown as speakers, those to be selected will be some of the nation's most prominent business men, and will talk on business, rather than political conditions.

The salesmen in their program are to have speakers who will strike a popular note, and the banquet will be a dinner and smoker, rather than a dinner-dance as was the case a year ago.

The Technical Association will hold its convention during the week, and the National Paper Trade Association will also be in convention, all of the most important meetings being scheduled for the Waldorf-Astoria.

During the entire week the Second Paper Industries Exposition will be in progress at Grand Central Palace, making it a week devoted to paper in all the phases of the industry's development.

Railroad rates have been granted to those in attendance on the basis of one and a half fare for the round trip, and this will apply to all the associations of the industry, by joint arrangement with the American Paper and Pulp Association.

Champion Fibre Co. Plant Shut Down

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 20, 1924.—The Bureau of Conciliation, Department of Labor, has a report from one of its conciliators, Charles Bendheim, who has been investigating labor conditions at the plant of the Champion Fibre Company, at Canton, N. C., where the plant is shut down.

In a very complete report Mr. Bendheim states that the latter part of December the managers of the paper plant informed the working men that they were selling their product below cost, due in part to the foreign competition, and that the cost of the raw material had been cut as much as possible.

The management stated further that there were two alternatives. Either the mill would have to shut down or the work would have to be cut down to four or five working days per week and a reduction in the operating cost. The suggestion was for a reduction of 10 per cent in wages and longer hours. The working men refused to accept the reduction and longer hours and therefore the plant was shut down on January 14. Mr. Bendheim states that about 1,400 workmen are affected. He is going to make an effort to see if something can't be done to remedy the situation.

Columbia River Paper Mills to Set Up Machinery

[FROM OUR REGULAR CORRESPONDENT.]

VANCOUVER, Wash., February 11, 1924.—The machinery and equipment for the new Columbia River Paper Mills has been delivered and the work of erection is to be started at once so that the mill may be in operation sometime in April.

The paper machine is a 3-press 136-inch Bagley & Sewall Fourdrinier built for a speed of about 700 feet per minute. The mill is also equipped with a Valley Iron Works wet machine.

The company at present owns and operates a large electric saw mill with a capacity of 125,000 feet per 8 hours. The slabs and unsalable portion of the lumber is to be converted into pulp for the paper machine. This is the only combined paper and saw mill on the Pacific Coast and it is expected that a high degree of efficiency will be obtained. The company has extensive woodland holdings near Camas, Wash., on the Columbia River. Saw dust is to be used for fuel and one set of boilers will serve both mills.

For Paper Simplification

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 13, 1924.—The Simplified Practice Division of the Department of Commerce has prepared a letter to send to the paper trade "with a view to the circularization of the industry for their acceptance of the initial step in the paper simplification program." Prior to sending this letter out, however, the division is sending to the chairman of the various subcommittees, a copy of the communication for their criticism. In part in its letter to the chairman the division says:

"Before distributing this material, however, I want to submit it to the chairman of the several subcommittees so largely responsible for the concrete achievement. Will you, therefore, kindly give me the benefit of any comments or suggestions as to the inclosures as well as the list of those to whom the circular letter is to be addressed?"

U. S. Envelope Co. Declares Dividend

[FROM OUR REGULAR CORRESPONDENT.]

SPRINGFIELD, Mass., February 14, 1924.—The United States Envelope Company in a directors' meeting here today declared a semi-annual dividend of $3.50 on preferred and $4 on common stock, payable March 1 to stockholders of record February 16.

COARSE PAPER DULLNESS LETS UP IN PHILADELPHIA

Prices Now Steady and Considerable Recovery Was Noted During Week—Cheaper Paper Stock Grades Active—Trade Interest in Graphic Arts Banquet Is Keen—Philadelphia Inquirer Solves Paper Freight Problem—Fine Paper Division Drops Matter of Prepayment of Freight—Paper Men Mourn the Death of Charles L. Van Reed—Personals and Brief Trade Items.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., February 19, 1924.—Another week has passed uneventfully in a business way although developing matters of interest in a personal bearing. Fine paper distributors calling attention to the existence of a greater period of dullness among the Philadelphia printers and publishers than has been suffered for some time, still found at the end of the week that sales of printing papers were slightly in excess of the preceding period because of the very active business being done with the out-of-town printing. All along these activities have been continuous, largely it is believed because of lower prices for printing which they have been in a position to quote. In Philadelphia much price cutting is being done but even at the recession from the high levels which had been prevailing the out-of-town printers are still able successfully to compete and they are getting the business and from them is coming the better part of the sales of fine papers.

Meanwhile the coarse paper business has made considerable recovery from the dullness it suffered while the fine paper was active earlier in the year. Prices on nearly all of the cheaper grades of coarse papers are now steadied and buying is now satisfactory. The only element of disturbance continues to be the offerings of foreign made papers.

Cheaper Stock Grades Active

Save for a little freer buying mixed and common papers, the paper stock market of the week continued without shade. Mill demand was not lively enough to bring about any advance of prices in the cheaper grades and quotations on the better grades were steady only because of the very limited amount of stock which is coming into the warehouses. Packers believe that just as soon as mill demands freshen up a bit advance in quotations is inevitable.

Paper Men Endorse Banquet

Trade interest in the second Graphic Arts Night to be held at the Manufacturers Club on Thursday Evening, February 28 is keen. The fine paper division of the Philadelphia Paper Trade Association meeting during the week at the Bourse not only gave the Graphic Arts Banquet endorsement but laid plans to carry invitations to attend to all its printer customers and so far as possible to their patrons as well. During the week Ralph G. Luff, treasurer of the D. L. Ward Company and who is acting as secretary-treasurer of the Banquet Committee, sent out formal announcements notifying the trade of the program as recently set forth here and inviting subscriptions which will be $3.50 per plate. Dress will be informal and the presence of the ladies particularly is desired. Announcement also was made during the week that in addition to Mr. Kendrick, the widely known New York printer, an address is to be made by President Wear of the Direct by Mail Advertising Association, and probably by a distinguished Dutch printer whose presence in this country as guest of a Philadelphia printer, is anticipated.

Newspaper Solves Freight Problem

The paper question was the dominant one in causing the Philadelphia Inquirer to plan the most unique newspaper publication plant in the United States, formal announcement of the definite building program being made by it this week. In order to obviate the old difficulty of hauling rolls of paper from the freight station to a warehouse and thence to the newspaper publication plant through traffic congested streets, the Inquirer proposes actually to erect its new 21 story home over freight tracks. It has chosen the site extending from Broad to 15th and from Callowhill street to Pennsylvania avenue, this being the Reading Railway system open subway freight station. Over the tracks supported on immense concrete caissons running down to bed rock from 10 to 40 feet beneath the tracks, it will raise its new 21 story publication plant, the ground floor area of which will be 70,000 square feet. The Inquirer uses approximately 1,000 tons or 40 carloads of news print each week, and under its building program the news print rolls coming from the mills will be rolled from the cars onto a platform under the building and thence be lifted by elevators to the first floor of the structure.

Freight Rates Question Dies

The fine paper division of the paper trade association, now virtually has laid to rest the long debated problem of the prepayment of freights on out-of-town deliveries. There never has been uniformity of practice on the part of the fine paper distributors on this matter, and virtually all of them now are agreed that there can be no uniformity in the matter of payment of freights to out-of-town points. The question was raised afresh recently by a prominent house which previously had branches in several of the larger cities of the State, but which has closed most of them. While the branches were in existence it expressed no concern over freight prepayments but now that they are closed its head suggested that competitors should agree with him on the imposition of freight charges on consumers in the out of town points. The overwhelming view of the houses represented in the fine paper division was that just so long as Philadelphia distributors were in direct competition with the distributors in Scranton, Wilkes-Barre, Harrisburg, York and other radio points it would not be feasible to impose freight charge on the bills of the buyers in these sections, or in any other to which deliveries could be made from the competing cities.

Trade Regrets Demise of C. L. Van Reed

Many in the trade during the week expressed regret at the death of Charles L. Van Reed, president of the Van Reed Paper Company of Reading, Pa., and widely known in local circles. He was the third member of the family directly connected with the paper business.

His grandfather, Charles A. Van Reed founded the Heidelburg Mill which afterwards was operated by his son, Henry Z. Van Reed until his death and then was continued by Henry's son, the late Charles L. Van Reed.

Paper Trade Brief News

In announcing the connection in last week's PAPER TRADE JOURNAL of Martin E. McCann with James Andrews, Inc., it was erroneously stated that Mr. McCann had formerly been with the Megargee, Hare Paper Company. He started his paper career with the old book paper house of Megargee & Green Company, which was merged with the Megargee, Hare Paper Company, and for a time was with the Martin & Wm. H. Nixon Mill in Manyunk. Mr. McCann is one of the most experienced book paper salesmen in Philadelphia, having had 21 years' experience in selling and manufacturing high grade printing papers. On account of the very close mill affiliations of James Andrews, Inc., Mr. McCann will be in an exceptionally good position to handle large tonnage business, and will have a very broad field on account of the wide variety of printing papers handled by this company.

There just has been added to the stock of the Paper House of Pennsylvania the Avalanche Bond made by the Gilbert Paper Company and which is offered at 18 cents in case lots. It will be stocked in white only but on occasions colors will be made.

The Paper House has long carried the Resource Bond also made by the Gilbert Company and sold at the slightly higher price.

J. F. Auer who continued the business of Auer & Twitchell and against which bankruptcy proceedings recently were brought during the week visited a number of distributors offering a line of glassine papers which he said were produced at his mill in Riverton.

A testimonial of the regard in which employes of the Whiting Patterson Company held John F. Harraux, until recently sales manager in the Philadelphia office, 13th and Wood streets, was given in their presentation to him of a Howard gold watch and chain. The presentation address was made by Frank Whiting recently elected treasurer of the company. President Allen E. Whiting made a commendatory address. Mr. Harraux has purchased an interest in the business of the Bishop Paper Company, New York.

Fire which broke out in the stock room of the S. S. Shryock Paper Mills in Downingtown caused a damage estimated at $1,000. The fire starting early in the morning was discovered by a workman on his arrival at 6 A. M. who immediately closed the fire walls connecting the various stock rooms and confined the damage to a single unit of the stock sheds. The loss was confined to a small amount of stock and the burning of the roof of the shed.

S. S. Shryock, Sr., who will shortly celebrate his 85th birth anniversary and who for some time was confined to the hospital, is now entirely recovered and his health so much improved that he is again able to be at his desk. He is the veteran head of the century old paper mills of S. S. Shryock Brothers, with Philadelphia headquarters at 928 Cherry street.

Curtis & Bros., Inc., 16 S. 5th street are distributing the new sample book of the long established Executive Covers made by the District of Columbia Manufacturing Company and including all the old standard lines compiled in a single sample book adapted for the printing and publishing trades.

Snow Hampers Paper Mills

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., February 18, 1924.—The most severe snowstorm and blizzard which Wisconsin has experienced in several years swept over the state early this week, paralyzing railroads and interfering seriously with operations of mills. In some cases it was almost impossible for workmen to reach the mills for two days and operations were considerably curtailed. Construction work at Peshtigo and Appleton was halted for several days.

One paper machine in the Peshtigo Paper Company mill was closed down for a day or two and operations at Combined Locks and Kimberly, both of which draw a large number of men from surrounding towns, were curtailed.

Logging operations in the north woods also are hampered by the deep snow. Considerable wood was being brought out until this week and it probably will be several days more before roads are broken sufficiently to permit rapid work.

Construction at Neenah to Go On

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., February 9, 1923.—William F. Wolf, one of the officers of the Valley Paper Mills Company, organized about two years ago to build a paper mill at Neenah, announced a few days ago that building operations on the plant would be resumed in the spring. The foundation of a large plant had been completed and work on a filtration plant was started when construction was stopped. It was reported by the contractor that lack of money forced operations to cease but this was denied by officials of the company.

It was intended to have the plant ready for operation by the summer of 1924 but there is no chance for getting the machinery installed much before 1925 if work is started again in the spring. The company was organized to make glassine and waxed papers but plans later were changed to manufacture opaque and manilas.

Maine's Pulpwood Cut Two-Thirds of Normal

[FROM OUR REGULAR CORRESPONDENT.]

BANGOR, Me., February 18, 1924.—Maine's pulpwood cut for the present season will be about two-thirds of normal, not on account of decrease in consumption, but because the pulp and paper companies still have fairly large supplies of wood on hand carried over from last season.

The Great Northern Paper Company will cut about 200,000 cords, it is estimated by Fred A. Gilbert, vice president and general manager of woods operations and timberlands for the company.

Conditions for operating are very favorable this season, there being sufficient snow for all purposes and a plentiful supply of labor available at a wage considerably below those of recent years. Up to January 1, common woods labor was paid $3.00 a day, but since that time, there have been so many men available in comparison to the number of jobs that the rate had dropped to $2.00 a day, including, of course, board and lodging.

The Great Northern is at present employing less than the normal number of men and horses, having about 2,500 men on the payroll for its woods operations and 1,500 horses. A number of tractors are being used in the woods and while their use does not show any saving in expense, Mr. Gilbert states that there is an advantage in the matter of employment of men, and in addition, the tractors are proving tremendously useful in keeping woods roads cleared for traffic. It is a notable fact that woods roads in the Great Northern Paper Company territory, scores of miles from civilization are kept open for automobile traffic much better than are roads in settled communities in the southern part of the state, as far as snow is concerned. The company is using 900 horsepower in tractors and one man with a tractor can do much more than a man with a team.

Mills of the Great Northern Paper Company are running at full capacity with the exception of the plant in Madison, where changes and improvements are being made, but one machine being in operation there. Three woods operations are being carried on, that at Rainbow being the largest.

F. H. Chase with Daniel M. Hicks, Inc.

Daniel M. Hicks, Inc., of 200 Fifth avenue, New York city, has made an important trade announcement to the effect that F. H. Chase, formerly president of Chase & Norton, Inc., is now a member of the Hicks forces.

The business of Chase & Norton has been terminated after an honorable career of twenty-six years and Mr. Chase comes to Daniel M. Hicks, Inc., with a fine reputation for business integrity, with a wide experience in buying and selling all grades of paper making materials and with an enviable acquaintance with the trade whose confidence he won long ago and has held for so long a time.

He has handled the same class of materials as Daniel M. Hicks, Inc., and has dealt with many first class mills so that he will readily fall into place in his new connection. Daniel M. Hicks, Inc., in addition to maintaining its own packing house, will also retain the New York city packing house formerly conducted by Chase & Norton, Inc. It will be in a position to furnish the same high standard quality as formerly and the acquisition of Mr. Chase will enable it to render even more efficient service to its customers than in the past.

New Industry for Corning

[FROM OUR REGULAR CORRESPONDENT.]

CORNING, N. Y., February 18, 1924.—The Corning-Fibre Box Corporation has been organized by prominent Corning men who are members of the Chamber of Commerce. The company is incorporated for $125,000 and the building which will be erected will cost $50,000. Fifty people will be employed at the start and the company will make corrugated fibre boxes and packing material.

IMPROVED PAPER DEMAND IS REPORTED IN TORONTO

Good Demand For News Print and Business in All Lines Is Increasing Although There Is Still Some Hesitation in Placing Sizable Orders—Major Hartt Says Output of Pulpwood From Crown Lands of the Province of Ontario For the Season Will Be 649,700 cords—Federal Government Collects Data of Pulpwood Exported From Frontier Parts of Ontario—To Build Dock at Port Arthur.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., February 18, 1924.—The present month is showing considerable improvement in the paper trade and orders are coming in a little more freely. There has been a noticeable betterment in the amount of work coming in to the small print shops but the bigger establishments report that business is still backward. News print is in good demand. All other lines seem to be picking up somewhat but there is still hesitation in placing sizable orders. January showed an increase with most jobbers over the corresponding period of last year. In the rags and paper stock there is more activity and prices show a tendency to strengthen. For all grades of domestic rags there is a lively requisition. Coated papers are still quiet but an improvement is looked for in the near future.

Thirty Thousand Men in Camps

Major J. I. Hartt, Inspector of Crown Timber Agencies for Ontario, says that 408,000,000 feet of timber, 3,176,000 railway ties and 649,700 cords of pulpwood will be the output of the present logging season on the Crown lands of the province. There are thirty thousand men and ten thousand horses employed in bush operations at present in Ontario camps. The revenue that the government will derive in dues will be $3,500,000 and the money paid out in bringing the logs and pulpwood to the mills will be $21,876,000. This does not include the cost of manufacture. Then there is the revenue reaped by the railways from freight and the money made from converting the logs and pulpwood into the finished product.

New Use of Logging Equipment

Charles W. Cox, of Port Arthur, Ont., has put in operation a Snowmobile and a Caterpillar tractor on Lake Nipigon. He has sixty-five miles of tote road across the lake and finds that these machines are working out splendidly. This is an entirely new method of logging in that district. Mr. Cox is taking out from two to three hundred thousand ties for the Canadian National Railway, and about twenty thousand cords of pulpwood. Prices compare favorably with last year. The demand is quite active and labor supply plentiful.

United Paper Mills Annual

The annual meeting of the United Paper Mills, Toronto, which have been in business in the wholesale paper line for fifteen years, elected R. I. Finlay, president, H. G. Finlay, vice-president, and E. L. Young, secretary-treasurer. A satisfactory report was presented for the past year and the outlook for the coming one is considered promising. In 1919 the company opened a branch in Hamilton under the management of C. W. Paul, which has developed an encouraging trade.

Big Undertakings by St. Regis Co.

W. F. V. Atkinson, of Toronto, chief engineer and manager at Godbout, Saguenay County, Que., for the St. Regis Paper Company, of Canada, has built up a splendid working organization for that body within the past year. Among the undertakings which have been carried out are deep-sea wharf and dredging with quay and tram lines, hydro electric power plant with 500 feet head and 600 h.p. yearly output; dams and canals; electric lights, booms and piers 6,000 feet long up the river; a flume for logs 1½ miles; stores, warehouses, residence, dwellings, hotel, boarding houses, hospital, camps, log roads, supply roads through the Laurentide hills from the sea, power schooner, telephone lines, etc.

Collecting Data on Pulpwood Export

The Federal government is collecting data on all pulpwood exported through the various frontier ports in Ontario. Instructions have been received from Ottawa asking that figures be forwarded covering the terminus at Bridgeburg. It would appear that the export of pulpwood shows a constant increase comparing each month with that of last year.

Company Had Fair Year's Business

The Hinde & Dauch Paper Company, of Canada, which established a plant in Toronto some thirteen or fourteen years ago, for the manufacture of container board, fiber boxes, corrugated boxes and wall board, held its annual meeting recently and, considering the state of trade during 1923, presented a very good report on the operations of the past twelve months. Sidney Frohman, of Sandusky, Ohio, was re-elected president; Ralph King of Toronto, vice-president; R. K. Ramsey, of Sandusky, secretary; J. Watt, Toronto, treasurer; T. E. Lloyd, Toronto, assistant treasurer, and O. H. Moore, Toronto, general manager.

Good Shipments of Pulpwood

The Thompson and Heyland Company, Toronto, which has made contracts for some fifty thousand cords of pulpwood to be delivered during the coming season, reports that it is shipping about thirty-five cars daily. One-third of the product going forward is poplar, for which there is a very good demand. The shipment of the latter wood is to Tyrone, Pa. The recent fall of snow and the colder weather has enabled many settlers to get out their wood to the railway tracks.

Counties Are Interested in Reforestation

The county council of York has decided to purchase four hundred acres in Whitchurch township toward the establishment of a reforestation area, at a cost of over six thousand dollars. The province will maintain the land for a period of thirty years and, at the end of that time, three alternatives will be open to the county. It can share on a fifty-fifty basis with the province in maintenance and profits; take over the area and pay back the amount that the province has spent on it without interest, or sell out to the province at the price paid for the site.

Will Build Dock at Port Arthur

The Thunder Bay Pulp and Paper Company, who operate a pulp mill of 60 tons capacity at Port Arthur, Ont., has awarded a contract for the construction of a dock of 252 feet frontage with 500 feet of trestle work, to the Thunder Bay Improvement Company.

Mr. Ratcliff Leaves for Europe

At the annual meeting of the Ratcliff Paper Company, which has been in existence for nearly a quarter of a century, F. L. Ratcliff was re-elected president; T. E. Gain, vice-president, and N. J. Ratcliff, secretary. A good report was presented on the business of 1923. F. L. Ratcliff left during the past week on an extended business and holiday trip to Great Britain and the Continent. He was accompanied by Mrs. Ratcliff.

Notes and Jottings of the Industry

George C. Winlow, sales manager of the Lincoln Mills, Merritton, who was confined in a Toronto hospital for a month as the result of a railway accident at Belleville, is able to resume his duties.

Fred W. Halls Paper Company, 257 Adelaide street, west, Toronto, has made extensive improvements to the interior of its offices and now has much better facilities.

Charles F. Bus, general superintendent of the Provincial Paper Mills, Thorold, and Mrs. Bus are spending a few weeks at St. Petersburg, Florida.

John Martin, of Winnipeg, former president of the Canadian Paper Trade Association, was in Toronto during the past week. His company was some time ago burned out in a bad fire but the premises are being restored and the firm expect to occupy its old quarters about July 1st next.

D. H. Haight of the Acme Timber Company, Sudbury, Ont., was in Toronto last week calling upon the trade. His firm is taking out fifteen thousand cords of spruce pulpwood this season for the Spanish River Pulp and Paper Company.

David F. Robertson, of Montreal, manager of the Canadian Paperboard Company, spent a few days in Toronto last week calling upon the trade.

H. A. Goldsbrough of the Hodge-Sheriff Paper Company, Toronto, has returned from a successful business trip to Calgary, Winnipeg and other points in the west.

H. L. Wilson, of the Wilson Stationery Company and the Winnipeg Envelope Company, Winnipeg, and P. L. Colbert, vice-president of the Valleyfield Coated Paper Mills, Valleyfield, Que., were in Toronto lately on business.

Gregg & Lytle, wholesale dealers, Simcoe street, Toronto, have dissolved partnership and Mr. Gregg has resumed his former connection with the Underwood Typewriter Company.

The annual meeting of the Provincial Paper Mills, Toronto, was held during the present week. T. A. Weldon, vice-president of the company, who has been spending some time in Florida, returned home for the gathering.

J. D. Lacey & Co. Improves Service

James D. Lacey & Co. has taken two important advance steps by opening a Montreal office and by closing arrangements for aeroplane service in its cruising operations.

Through the New York office at 350 Madison Avenue the company has completed arrangements with the Laurentide Air Service, Ltd., of Montreal, for the exclusive use of their organization and equipment in joint forest engineering work. This co-operative agreement, effective January 1, 1924, makes possible a superior service to timberland owners and operators by a close co-ordination of air and ground methods of examination and reports.

Aeroplanes are of proven value in reconnaissance and have passed the experimental stage for sketching and mapping. In the combined service now offered they will be used whenever a saving in time and expense can be gained, or they are of practical value in making base maps and in showing the distribution of forest types and the location and area of waste lands and water. The intensive timber estimating, which can be properly done only by a ground cruise, will then be confined to the merchantable timber. Evenly timbered properties having little type distinction and containing little or no waste areas or cut over, will be cruised in the usual way.

Laurentide Air Service, as pioneers in the use of aeroplanes for timberland investigations on this continent, has built up an efficient organization operating with modern equipment. Lacey & Co. has kept pace with the developments in the timber using industry in all parts of the country over a period of forty-four years. The established methods which have made Lacey reports the standard in the past will assure completeness and reliability in all work done in the future.

To facilitate the handling of general Canadian business as well as forest engineering service James D. Lacey & Co. is establishing a branch office under Dominion Charter in the Drummond Building, 511 St. Catherine street, W., Montreal.

T. Y. Sien Visits Watertown

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., February 18, 1924.—T. Y. Sien of Shanghai, China, graduate of the University of Michigan and well versed in American customs and language, arrived in the city Tuesday night on an extended trip throughout the United States. After a few days passed in this locality he will pass on to Boston and other Eastern points.

"I came to Watertown," he said, "because I knew it to be one of the greatest paper manufacturing centers in the country. It is my first visit here but I am already very much pleased with the people here." Mr. Sien says he represents no organized paper manufacturing company in China but that he is interested in plans being perfected for the establishment of a plant there in the near future. He is traveling in quest of knowledge on every phase and invention of the trade.

Educated in the elementary subjects and the English language in the schools of Shanghai he was sent to the University of Michigan and completed a four years study in the executive and commercial courses there. His degree obtained he set forth to observe and absorb all he could of the science of paper manufacturing. He visited factories and mills of the trade in Wisconsin, Michigan, Washington and intervening points before coming here.

Wednesday morning he made his presence known by calling at the office of Taggart Brothers Company. "I understand you have the largest plant in this city," he said to Jacob F. Amos, treasurer of the company," and I would be pleased to inspect it."

Leading the young man to the plant Mr. Amos introduced him to Kenneth Gallinger, superintendent. With a facetious expression indicative of at least partial Americanization the Chinaman remarked, "You are not the senior member of the firm of 'Mr. Gallagher and Mr. Shean?'"

After passing the forenoon going through the big bag manufacturing plant Mr. Sien was advised to visit the Bagley & Sewall plant. "You will find them very fine people," suggested Mr. Amos. "I want to say that I know they will use me fine for that has been my experience everywhere," he replied. He went to the Bagley & Sewall Company plant Wednesday afternoon and was given an escort of one of the officers throughout the entire establishment.

After inspecting the big news print plant of the St. Regis Paper Company at Deferiet and other mills in this section Mr. Sien will leave for Boston, New York, Philadelphia, Washington, D. C. and back to the Coast on his way home.

Big Hauls of Jack Pine

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., February 11, 1924.—Thousands of cords of jack pine are being hauled into the yards of the Nekoosa-Edwards Paper Company at Nekoosa by farmers from the neighborhood. Approximately 37,000 cords of jack pine were used by the company last year and of that amount about 7,000 cords was hauled in by farmers in the neighborhood and most of the remainder was shipped by rail from the southwestern part of the state.

Large inroads in the jack pine forests of the state were made by fire in the last year or two and there is grave danger that the supply soon will be wiped out unless something is done to remove the fire menace. Nine sections of jack pine land were swept clean in one district by fire last year.

Farmers are being paid $7 a cord for dry pine and $8 a cord for green pine delivered to the Nekoosa yards. The green pine yields much more fibre. Specially constructed machinery piles the pine in the yards. Most of the logs hauled in by the farmers are uniform in size. The smallest logs accepted are four inches in diameter and the logs seldom exceed 16 inches.

KALAMAZOO PAPER CONCERN PASSES INTO NEW HANDS

Bert Cooper and Frank Niessink Take Over Star Paper Co.—Protest Made Against Alleged Inadequate Freight Service on Part of Pennsylvania Railroad—Kalamazoo Paper Box Co. Reports Large Increase in Sales for 1923—Loose Leaf Binder Co. Holds Annual Meeting—Elam Paper Co. Decides Not to Move to Dayton, Ohio—C. H. Wright Makes Contract with Allied Paper Mills.

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., February 19, 1924.—The Star Paper Company, 407 East Main street, established over a decade ago by Selig Stern, has been purchased by Bert Cooper and Frank Niessink and will be operated by them in the future. This concern will remain in the same quarters and will occupy over 18,000 square feet of floor space, handling a complete line of twine, wrapping papers, stationery, office supplies and all kinds of paper novelties.

"We will develop the territory in Kalamazoo and vicinity" said Mr. Cooper this morning. "We have active accounts as far south as the Indiana state line, north to Cadillac, east to Albion and west to Lake Michigan. By an extension of our sales force and energetic effort, we plan to materially develop trade in the territory available."

Mr. Niessink is well known in Kalamazoo, having for years been associated with his father in the retail grocery business in South Burdick street at Burr Oak street. Mr. Cooper has a wide acquaintance in the paper trade. For years he was purchasing agent of the Kalamazoo Paper Company. He resigned that position to go with the Kalamazoo Stationery Company and since January 1 has held the position of assistant treasurer of the Dunn Sulphite Paper Company, Port Huron. He resigned the latter post to take over his interest in the Star Paper Company.

Shippers Make Protest

Protests against what they term is inadequate service on the part of the northern division of the Pennsylvania Railroad have been filed by shippers of Kalamazoo and Grand Rapids with the Interstate Commerce Commission, Washington, D. C.

In this connection, R. A. Tuttle, traffic manager of the American Boxboard Company, Grand Rapids, and president of the Michigan Traffic League, went to Washington Tuesday morning. He took with him communications from the traffic bureaus of the Chambers of Commerce in the two cities, calling attention to the conditions claimed to exist along the division.

These letters claim the trouble lies with shortage of motive power; that a considerable number of locomotives have been withdrawn from service on the Northern Division (G. R. & I.) ostensibly for repairs and that they have never been restored. In this connection, Charles H. Winslow, traffic manager of the Kalamazoo Chamber of Commerce, has protested against the lack of switching facilities in the local yards.

The matter has previously been called to the attention of the I. C. C., who have agreed to send a man to this territory, canvass the situation and insist on the Pennsylvania furnishing the power required.

Large Increase in Gross Sales

The Kalamazoo Paper Box Company was able to report a 40 per cent increase in gross sales during 1923 at the annual meeting of the stockholders. Competition has been keen in this line during the past year, with considerable price cutting the result.

The following directors were re-elected: S. E. Giffert, Grand Rapids; A. H. Huelser, Chicago; Robert E. Staebler and E. H. Distin, Kalamazoo. S. E. Giffert was renamed president and E. H. Distin, vice president. Robert E. Staebler is treasurer and general manager. He was relieved of secretarial duties by naming Miss Zola Whiting, secretary of the concern.

Loose Leaf Co. Election

An excellent year for 1923 was shown the stockholders of the Kalamazoo Loose Leaf Binder Company, at the annual meeting held Tuesday afternoon in the general offices of the concern. Indications are that all production records will be excelled during the ensuing 12 months.

The following board of directors was elected for 1924: F. W. Blowers, E. S. Rankin, H. S. Humphrey, Clare Stearns, W. M. Blinks, L. L. Allen and George P. Wigginton. The officers named for this year are: President, George P. Wigginton; vice president, H. S. Humphrey; vice president and general sales manager, Leon L. Allen; secretary-treasurer, H. J. Broomhall.

Held Second Annual Party

The second annual party given by and for the employees of the Kalamazoo Stationery Company at the Masonic Temple, Friday night, took the form of a valentine party. More than 750 attended.

Every department in the big plant was down for a stunt, all responding capably. There was a multiplicity of costume effects introduced. Interspersed with the program features on the stage was dancing, while punch was served in the lobby and light refreshments in the dining room below.

This very successful affair was engineered by the following committees: General, H. A. Wetz, Miss Marguerite Sullivan, Miss Gladys Allen, George Gagoudy, Roy Doty, Edouard Marantette, William Higgins, Joseph O'Brien. Reception, George Gagoudy, Miss Jean Clifford, Miss Gladys Allen, Paul Kellogg, Edouard Marantette, Roy Doty. Music, C. E. Reid. Publicity, Miss Marguerite Sullivan. Program, H. A. Wetz, Joseph O'Brien, C. E. Reid. Refreshment, George Gagoudy, Miss Marguerite Sullivan, Miss Jean Clifford, Miss Gladys Allen, Edouard Marantette, Joseph O'Brien. Floor directors, George Gagoudy, Edouard Marantette, Roy Doty, George Nason.

Michigan Division Meeting

The February meeting of the Michigan division of the American Pulp and Paper Mill Superintendents' Association will be held Thursday evening, at the Park American hotel. Two speakers will appear. Edward Rhoades, of J. E. Rhoades and Sons, Chicago, will talk on "Gannett Leather Belting in Paper Mills," while Mr. Sherwood, of the B. F. Goodrich Rubber Company, Akron, will handle the subject, "Cutless Bearings for Paper Mill Service."

Changes Its Moving Plans

Local stockholders of the Elam Paper Company, Marion Ind., are mystified by the notice just received from the general offices that the plan to move the concern from Marion to Dayton, Ohio, has been dropped, and with it the idea of re-organizing under the laws of Ohio. With it is the announcement that the annual meeting for the election of officers will be held Tuesday, February 19, at Marion. Three local concerns are quite heavily involved in this concern, two through recent shipments of paper, the other by notes in hand for shipments made in the past.

Contracts for Machine Output

C. H. Wright, paper dealer with offices in the Kalamazoo National Bank Building, has entered into a contract with the Allied Paper Mills whereby he absorbs the entire output of the smallest machine in the Monarch division. As a result he is prepared to furnish book, medium grades of writing paper and cover stock in any width of deckle from seven and a half inches up. This machine trims 56 inches wide and has a daily production of five to eight tons, according entirely to the conditions surrounding the run.

MATHIESON System

Can You Read Between the Lines?

THE Mathieson Multi-Unit Chlorine Tank Car has been approved by the Interstate Commerce Commission. Our specially designed car carrying fifteen one-ton containers of Liquid Chlorine, instead of a single fifteen-ton tank, is now entitled to the same freight rates and privileges as other tank cars.

To the Pulp and Paper Industry, this decision means official approval of a tank car construction ideally adapted to the safe, economical and convenient use of Liquid Chlorine. The Multi-Unit Car, with its individually-weighed containers of exactly two thousand pounds net, provides an accurate unit measure for preparing uniform bleach liquor. In checking and stock-taking there is never any uncertainty as to the quantity of Liquid Chlorine received or on hand.

Over two years ago we voluntarily went to the expense of designing and placing in service the Multi-Unit Tank Car. Upon refusal of the railroad companies to allow us tank car rates, we appealed to the Interstate Commerce Commission for removal of this discrimination, and continued making shipments in our special car. We have assumed all excess freight charges on every movement of this car and during the past two years have paid out over two hundred thousand dollars in order that consumers and the general public might enjoy the many advantages realized in this type of equipment. The recent ruling of the Commission awards us full reparations with interest and completely vindicates our faith in the Multi-Unit "Safety First" principle.

To those who will read between the lines, the story of the Mathieson Multi-Unit Tank Car will exemplify the sound, constructive policy that has made us the leaders in the Chlorine Industry.

The MATHIESON ALKALI WORKS Inc.
25 WEST 43rd STREET NEW YORK CITY
PHILADELPHIA PROVIDENCE CHICAGO CHARLOTTE

EAGLE THISTLE PRODUCTS

Deal Direct with the Manufacturer

Bicarbonate of Soda
Liquid Chlorine-Caustic Soda
Sesquicarbonate of Soda
Bleaching Powder-Soda Ash

MONTREAL LEARNS ABOUT $10,000,000 PAPER PLANT

Minister of Lands for British Columbia Announces That Start Will Be Made on Prince George Project—Laurentide Co. Issues Financial Report Showing Record Revenue—Shareholders and Directors of Wayagamack Co. Hold Meetings—Water Power Development Bills Introduced in Legislature—Embargo Hearing Develops Pronounced Opposition From Many Sources.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., February 19, 1924.—The Hon. T. D. Pattullo, Minister of Lands for British Columbia, who has been visiting Montreal, states that a start will be made this year on the construction of the much-talked-of $10,000,000 pulp and paper plant near Prince George, B. C. Frank P. Jones, of Montreal, president of the Canada Cement Company, and Angus McLean, well-known lumbermen in Eastern Canada, are the moving spirits in the Frazer Timber Syndicate which has been conducting the negotiations with the British Columbia government during the last two years. The syndicate is backed by ample Canadian and British capital to establish one of the largest paper and pulp plants in Canada. It already controls thousands of square miles of pulpwood reserves along the upper reaches of the Frazer and tributary streams and has had engineers at work for several seasons securing the necessary data for hydro-electric development required for operations on such a big scale. The main point at issue between the government and the promoters of the Fraser Timber Syndicate has been the desire of the heads of the syndicate to have the government bind itself to impose a fixed royalty, or stumpage rate, for a period of 30 years, on the timber used by the syndicate in its pulp-making operations. This, the government has steadfastly declined to do, claiming that it had no right to bind future governments, especially on questions affecting the disposal of one of the natural resources of the country. This point has tied up the project for the last two years. Hon. Mr. Pattullo states that Messrs. Jones and McLean, as the heads of the syndicate, have as a result of the representations made by the British Columbia minister at their recent conferences, receded from their position and agreed to pay the current rate of royalty for a five-year term, the future rates to be fixed by the government or arbitration at the end of each five-year term. It is understood that the chief hydro-electric development will be located at Isle St. Pierre rapids, about 30 miles below Vancouver, where 50,000 h.p. is available.

Record Revenue for Laurentide Company

The annual financial report of the Laurentide Power Company, Limited, for the year ended December 31, 1923, shows gross and operating revenue at the highest in the history of the company. The settlement of income tax accounts and water rental accounts for the years 1918-1922, the bond sinking fund requirement, and provision for 1923 income taxes left a balance of only $406,237 with which to meet dividend requirements of $525,000, leaving a debit balance of $118,763. Applications of the previous balance of $69,238 and the withdrawal of $60,000 from contingent reserve created a balance of $10,474 at credit of profit and loss. The present statement is based on the sale of 125,000 h.p. for the year. The company has installed a total of 165,000 h.p. With the improvements in the water regulation on the St. Maurice river and the prospect of selling a certain amount of peak load power, it is expected that this extra 40,000 h.p. of capacity can be used to increase the income of the company.

Wayagamack Annual

The annual general meeting of the shareholders of the Wayagamack Pulp and Paper Company, Limited, was held at the head office of the company, Three Rivers, last week. The following were elected directors: Norman J. Dawes, G. H. Duggan, Hugh Mackay, K. C., Alex. MacLaren, Sir William Price, James W. Pyke, C. R. Whitehead. At a subsequent meeting of the directors, C. R. Whitehead was elected president and James W. Pyke, vice-president.

More Water Power Development

Extensions of the government's plans for electrical development in the Province of Quebec, with the subsequent creation of industrial towns, is provided for in several measures which Hon. Honore Mercier, Minister of Lands and Forests, has before the Legislature this session. One bill laid before the House provides for an increase to $3,000,000 in the sums which the government may spend for the development of the water powers of the St. Maurice river and its tributaries. In 1912 a sum of $1,100,000 was voted for the purpose. In 1918 the amount was raised to $2,500,000 and there is now an additional half million dollars to be raised. This work on the St. Maurice river comprises the huge Gouin dam at La Loutre, the greatest reservoir in the world, and the government has drawn annually from its investment sufficient to pay interest, sinking fund, repairs and maintenance, and a considerable additional revenue. Another bill deals with the power development of Lake Kenogami. In 1918 the Legislature voted $1,800,000 for these works and it is now proposed to extend them, so an additional $950,000, or $2,750,000 in all is to be expended. With the passage of the bill for the construction of a control dam on the Riviere du Loup, the arrangements for another new power development in the province have advanced a step. The dam is being erected by the province under its usual plan of controlling the flow of streams, and charging the annual cost to power companies benefitting from the use of the controlled water supply. In the debate in the house it came out that the Central Quebec Power Company, now known as the Algonquin Power Company, was behind the development. This corporation recently changed its authorized capitalization from $1,000,000 to $2,000,000.

Against Pulpwood Embargo

The Royal Commission on pulpwood held sittings in Montreal during last week and practically all the evidence brought before it was to the effect that if an embargo is placed on Canadian pulpwood, it will mean higher prices, heavy losses to farmers and settlers, and loss of the United States as a customer. The objections were many and varied, according to the particular interests of the various witnesses. They all agreed, however, that an embargo would be detrimental to all concerned. One witness, Mr. Thayer, said that his company acquired 287,000 acres of freehold timber lands in Nova Scotia, and 56,000 acres in New Brunswick, two years ago. A Canadian embargo would mean, he said, that the pulpwood will be imported in toto from northern Europe, where, he declared, the supplies are sufficiently large to furnish the United States market.

Paper Company Awards Contract

The St. Regis Paper Company, of Canada, Ltd., has awarded a general contract in connection with a $100,000 hydro-electric power development at Godbout, Que., to the Canadian Comstock Company. The contract includes installation of water wheels, generators, penstock, transmission lines, pumps, motors and electrical distributors.

Lumbering Well Under Way

Lumbermen from various parts of New Brunswick report that the work is now well under way and that the set-back which they received earlier in the season, owing to the fact that the ground did not freeze up until late, has now been overcome in many cases. The gangs are for the most part complete, although the turn-over still permits of several men being taken on every day. Snow conditions are very favorable at the present time, but it is hoped that there will be an additional fall before the spring break-up that there may be enough water to permit of successful stream-driving.

Famous Products Series No. 13

Valley Iron Works Co. Builds Equipment *for making* Upson Board.

The Upson Company, manufacturers of Upson Wall Board, are known to the trade as "Fiber Board Authorities," and their products are of fine quality. If this were not true, they would not hold the position in the trade that they do. One reason for their products being of so high a grade, is the care with which all of the materials used in their making, and the finished products are tested. Among other pieces of equipment made by the Valley Iron Works Company and used in making Upson Products, is the Valley Size Tester, which performs an important function in the Upson Laboratory.

UPSON
PROCESSED
BOARD
THE UPSON COMPANY
LOCKPORT
N.Y.
TRADE MARK REGISTERED

The nearest perfect wall and ceiling material.

Valley Size Tester

1. Makes it possible to accurately measure the sizing used.
2. Makes it possible to keep size more constant during a run and from run to run.
3. Makes possible a real saving in the amount of size and alum used.

Write today for pamphlet giving full particulars regarding the Valley Size Tester.

VALLEY IRON WORKS CO.

Plant: APPLETON, WISCONSIN

New York Office: 350 MADISON AVE.

See our display in Booth 87, at the Paper Industries Exposition, April 7-12th

CHICAGO HAS SLIGHT DROP IN DEMAND FOR FINE PAPER

Trade Finds Virtually All Lines Moving with Celerity, However—Roofing Stock Takes Jump and Is Now at Peak—Rall and McKee Enters Business Arena—Bermingham and Prosser Co. Preparing to Move to New Quarters—Parker, Thomas and Tucker Paper Co. Has Novel Paper Display—Harry Joyce Home From South America—Plans for Meeting of American Paper Stock Association.

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, February 18, 1924.—Although the demand for fine papers dropped off slightly during the past week, there is no complaint on the part of merchants who constantly reiterate that business is in good condition and virtually all lines are moving with celerity. Book papers are being featured on account of printers having so much work on hand. Since the first of the year this end has picked up splendidly. There have been no price changes on coated papers for the past week.

One paper house reports that bonds are a little weak and have been so for some time and furthermore, there does not seem to be much hope for strengthening in view for the near future. While the demand is fair, there is an abundance of supply to meet it—particularly in sulphite.

Coarse papers continue on the upgrade. An increasing demand is keeping mills busy now, many to capacity, to fill orders, some of which specify immediate shipment.

Roofing stock took another jump within the last fortnight, now being sold in the Chicago territory for $46 per ton, f.o.b. this city. This is approximately 50 per cent higher than prices in effect two months ago. A brisk demand is reported. However, it was stated by an authority, that these quotations represent the peak and that they will not mount further.

The paper bag business has been much better of late. As a matter of fact, since the first of January it has had an upward trend and the recent 10 per cent increase in price of all grades of bags indicates a quickened demand with quantity orders becoming more prevalent each week. Last week there was also an increase in the price of toilet papers, amounting to about 10 per cent with a tendency toward higher levels.

The market on waste papers is weaker. On most lines there has been a cut in prices. On some varieties of waste the decreases were more radical than in others. A few experienced slight increases such as No. 1 and No. 2 Mixed Shavings.

New Chicago Firm Sells Bags and Toilets

Since the first of the year a new firm has been operating in the Chicago territory under the name of Rall and McKee. This is a partnership formed by two men who are well-known in the paper industry. Harry E. Rall is the senior partner while Charles W. McKee is the junior partner. Mr. Rall is perhaps better known. He has been selling paper bags in this territory for 25 years. One of his connections was with the Continental Bag Company. Mr. McKee was connected with Arthur R. Rapp, a Chicago paper merchant, for two years in a sales capacity.

Rall and McKee will act as sales agents for the Regal Paper Company, of Pulaski, N. Y., handling their line of toilet papers, and the E-Z Opener Bag Company, of Decatur, Ill., with their paper bags. Offices are maintained in the Conway Building, Chicago.

Bermingham and Prosser Will Move

Preparations are being made by the Bermingham and Prosser Company to move their Chicago offices to the new Burnham building which is now nearing completion at the corner of Randolph and La Salle streets. Removal will take place about May 1. Offices in the Burnham building will be on the thirteenth floor. Present quarters on the sixteenth floor of the Otis building are becoming too small for the rapidly expanding branch of the organization. With the occupation of larger space it is contemplated the staff will be enlarged somewhat.

It is announced that Walter Bermingham, vice-president of the Bermingham and Prosser Company, will hereafter be located in the Chicago office of the firm. Mr. Bermingham was previously stationed in New York, but some change made it necessary for him to use Chicago as his headquarters.

Revolving Panels as a Paper Display

Chicago paper merchants have various ways in which to display their respective lines to prospective customers. One that has proven decidedly effective is in use at the office of Parker, Thomas and Tucker Paper Company, of which Harry D. Thomas is president.

Hung on a side wall, in a direct line with the entrance, is a "Multiplex" revolving display rack. It is made up of six double-sided panels, each approximately three feet wide by four feet high, which revolves in a bracket top and bottom exactly like pages in a book. The framework is metal while the panels themselves are of a preparation into which thumb tacks may be easily driven.

The rack hangs at a convenient height so that the average person may not have to discomfort himself to inspect the samples of paper mounted on both sides of the panels. There are in all, 132 samples of paper shown. In some cases these are small booklets containing a range of colors of a single grade. Samples of printing as it takes on certain papers are also given. Nothing is left to the customer's imagination. He is shown.

Harry Joyce Returns From South America

After spending somewhat more than five weeks in a trip from Chicago to South American points, Harry Joyce, of the Empire Paper Company, this city, returned to his desk on February 7. He left with his family a few days after January 1, going by way of New York city to Havana, Cuba, Panama, Bahama Islands, Trinidad, Virgin Islands and Nassau. He spent several days in New York before coming on to Chicago.

Expect Big Attendance at Paper Stock Session

The next meeting of the American Paper Stock Association is set for Friday, February 29, in the Green Room, of the Lexington Hotel, Chicago. This will be the first regular monthly meeting of the organization since it was formed late in January. It will be a business session all the way through. Nothing definite can be announced concerning the matter to come before the delegates, but according to Secretary Francis Hughes, of the Francis Hughes Company, Chicago, there will be several committees appointed, including one on memberships, grievances, traffic and standardization of packing. Dinner will be served at six p. m. An attendance of fifty is expected.

Tribute to Louis Dessert's Memory

[FROM OUR REGULAR CORRESPONDENT.]

APPETON, Wis., February 18, 1924.—A touching tribute to the manly character, sympathetic nature and businesslike qualities of Louis Dessert, second vice-president of the Wausau Sulphate Fibre Company, who died recently, was paid in a memorial resolution adopted by directors of the company at a recent meeting.

"Louis Dessert belonged to that fast vanishing group of men and women that were the glory of early Wisconsin history," the resolution said. "He was modest, simple in his tastes, unostentatious in his life, humble as to his ability, or irreproachable habits, a man of truth and integrity, a passionate lover of nature in her divine enchantment, a gentleman who ever rejoiced in the success of others and sympathized with them in their troubles."

Copies of the resolution were sent to Mr. Dessert's family.

Established 1886

Service

Words, someone said, are used to conceal meaning. Perhaps that is why so many people use the word "Service." No word has suffered greater abuse. Service can mean much, or little, or nothing.

With this organization, service for thirty-eight years has meant everything, without reservations, mild or otherwise. Ours is always service plus, never minus. We protect our own interests by being so jealous of the interests of our clients.

M. GOTTESMAN & COMPANY

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18 East 41st Street

New York, N. Y.

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Stockholm, Sweden.

BLAKE, MOFFITT & TOWNE START BUILDING

Los Angeles, Cal., February 11, 1924.—Blake, Moffitt & Towne, wholesale dealers in paper, stationery, twines, etc., celebrated the formal beginning of operations upon their new warehouse in the rear of their present quarters at 242-8 South Los Angeles street, Saturday afternoon, January 19, by a ground-breaking ceremony. The new building, which will have an eastern frontage of 200 feet, will be four stories and basement, Class A construction, reinforced concrete. It will be down-to-the-minute in point of construction; will have a loading arcade to accommodate twenty-three trucks at one time, and will give Blake, Moffitt & Towne an added 137,000 square feet of space. The erection of this building is necessitated by the rapid growth of the business enjoyed by Blake, Moffitt & Towne.

F. M. Couch in Charge of Ceremony

The ground-breaking ceremony was held at 3 o'clock and was in charge of the General Manager, F. M. Couch. The following delegation were present from the parent house in San Francisco: J. K. Moffitt, A. G. Towne, James W. Towne, A. W. Towne, Frank Unthank and Franke Lange. The speakers were: Rev. Benjomin S. Haywood, pastor of the Wilshire Methodist Episcopal Church, who gave the invocation; A. F. Stepan, secretary of the Western Wholesale Drug Company and president of the Los Angeles Credit Men's Association; C. S. Hutson, president of the C. S. Hutson Company, and also president of the Lions' Club; Harry Mason, general manager of the Electrical Equipment Company and president of the Rotary Club; John W. Kemp, representing the Los Angeles Chamber of Commerce; J. A. Cattell, secretary of Simpson-Ashby Company and president of the Los Angeles Wholesalers' Board of Trade; F. B. McComas, president of the McComas Dry Goods Company, and J. K. Moffitt, of the First National Bank, San Francisco.

A. G. Towne Turns First Spadeful

The president of the corporation, A. G. Towne, turned the first spadeful of earth, thus officially starting off operations upon the new building which it will take approximately nine to ten months to complete. The building will be erected by the Clinton Construction Company of California and will be under the charge of S. A. Jubb, manager of that corporation.

Other invited guests upon the platform were the following: Harry Stevens; E. L. Ide; A. M. Dunn; George Rice, Jr.; D. B. Couch; W. M. Bowen; John Kingsley; A. J. Goldwater; James F. Weston; Louis T. Mork, of the Pacific Coast Envelope Company; E. S. Montgomery, of Johnson, Carvell & Murphy; Dr. Richard L. Rice, of the Brown Company, Portland, Me.; S. G. Wilson, Hoberg Paper and Fibre Company; E. L. Worth, Dennison Manufacturing Company; Bruce and Harvey Brown, of the Paraffine Companies; W. B. Collins, Northern Paper Mills; Frank Philbrook, Graham Paper Company, and William R. McHaffie, Crown Willamette Paper Company. The greater part of the three hundred and odd employees of the Los Angeles house of Blake, Moffitt & Towne were present at the ceremony.

In the evening at 6 o'clock a banquet was held at the Elite Catering Company, 633 South Flower street, for all the employees of the Los Angeles house of Blake, Moffitt & Towne. At this banquet there were over three hundred present, including the delegation from the parent house at San Francisco and delegations from San Diego and Phoenix, Ariz. The program consisted of community singing in charge of A. Rae Condit and an orchestra composed of Mr. and Mrs. H. E. Baines and Mrs. Lucille Cox, assisted by Miss Lucille Folsom, solo harpist, and Mrs. Porter Custer, vocal soloist. Interspersed during the musical program were short addresses by members of the San Francisco delegation and department managers of the local house. Manager F. M. Couch presided as toastmaster.

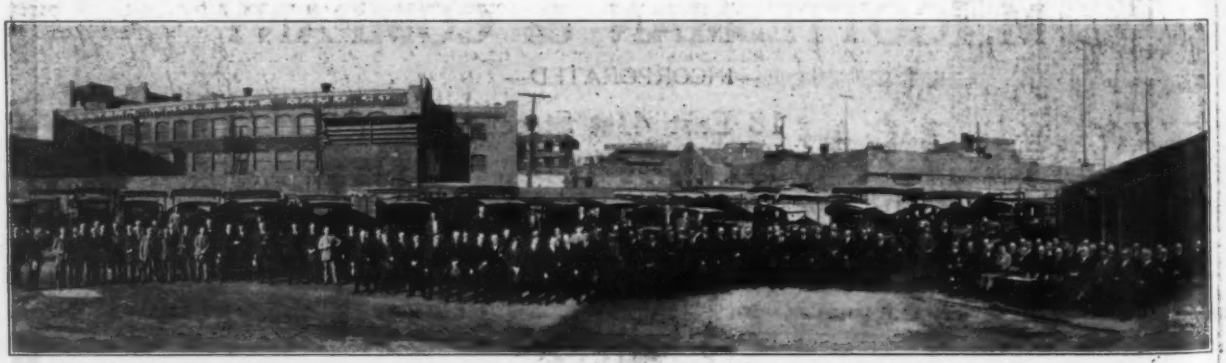
New Tulip Numbers for Soda Fountains

The Paper Utilities Company, Inc., manufacturer of the well known line of Tulip Paper Drinking Cups and other sanitary paper products, is bringing out several interesting new numbers designed especially for the soda fountain trade.

They consist of the Tulip cup in sizes 7-8-10 and 12. These are the sizes most generally used for dispensing soda water. The cups will have the standard Tulip exclusive features: the rolled rim; freedom from a wax-like taste; single piece construction; the resultant leakproof qualities.

In connection with these new numbers, the Tulip cup manufacturers are also introducing a dispenser for soda fountain use. It is similar in type to the Standard Tulip plunger dispenser, but is equipped with a bracket which makes it possible to affix it to the soda fountain counter. It will be made in sizes 7-8-10 and 12. The dispenser is unusually attractive, and will add materially to the appearance of any soda fountain. In addition, it will simplify the dispensing of soda materially, as it is equipped with a hook which catches the cup as it is released by the dispenser.

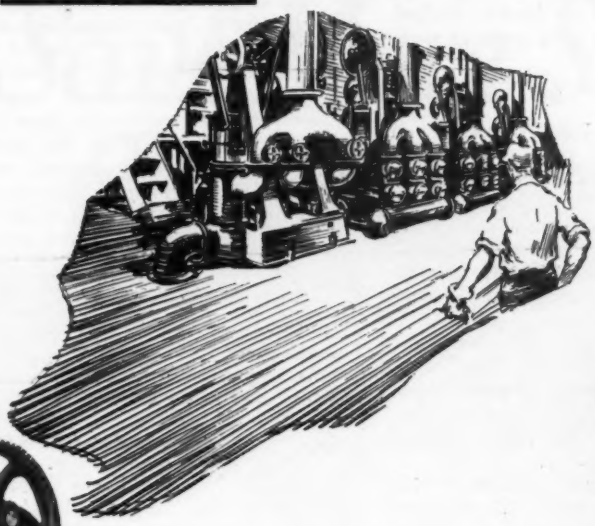
Another new item for use with the soda fountain cups is a nickel cup holder with handle. This is made in a very attractive design. Not only does it add to the general desirability of the Tulip soda fountain service, but it serves to round out the entire line of Tulip paper products. The cup holders are in two sizes: one for use with the No. 12 cups; and the other for holding the No. 7-8 and 10 cups.

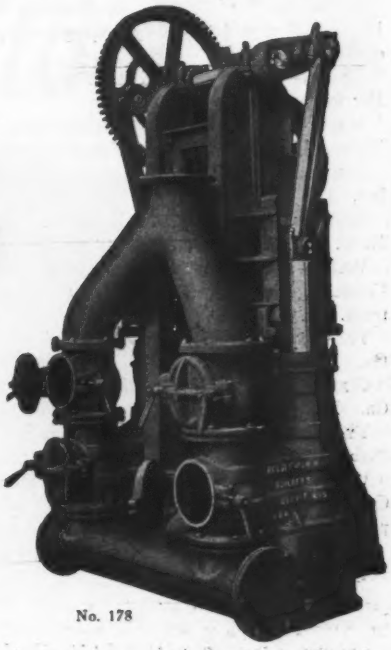


Breaking Ground for Blake, Moffitt & Towne Warehouse

BELOIT IRON WORKS PAPER MACH'Y BELOIT WIS.

The Efficiency Pump for Paper Mills





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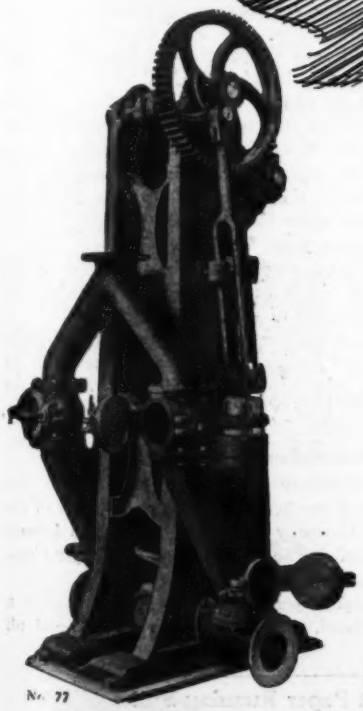


No. 77

BELOIT pumps are called "heavy duty" pumps because they are sturdy and strong. They are built for continuous 24-hour service and are gluttons for hard, steady work. They are regarded as the present-day *efficiency* pump for paper mills.

On our triplex pumps you will find forged steel crank shafts instead of cast steel. Our locomotive type connecting rod (regular equipment on our heavy-duty pumps) takes up the wear on crank and wrist pins while pump is in operation. The self-aligning feature prevents undue strain on cranks or frames.

If ever a part does become broken or worn out after years of hard usage, their construction is so handy that the repair can be effected easily and quickly, without the necessity of buying a considerable portion of a new pump.

Thousands of experienced board makers the world over know that Beloit pumps "deliver the goods."

It will pay you to turn first to BELOIT.

Beloit Iron Works BELOIT IRON WORKS PAPER MACH'Y BELOIT WIS. **Beloit, Wis., U. S. A.**

Established 1858

Trade-Marks Department

CONDUCTED BY NATIONAL TRADE-MARK CO., WASHINGTON, D. C.

The following are trade-mark applications pertinent to the paper field pending in the United States Patent Office, which have been passed for publication and are in line for early registration unless opposition is filed promptly. For further information address National Trade-Mark Company, Barrister Bldg., Washington, D. C., trade-mark specialists. As an additional service feature to its readers, PAPER TRADE JOURNAL gladly offers to them an advance search free of charge on any mark they may contemplate adopting or registering.

SCCIETY—No. 168,304. Hampshire Paper Company, South Hadley Falls, Mass. For printing and writing paper.

DUROTYPE—No. 175,859. D. Gestetner, Ltd., London, England. For stencil papers, especially prepared for printing papers in duplicating machines.

BEAVER—No. 189,447. Capital Paper Company, Indianapolis, Ind. For toilet paper.

MAJEXTIC—No. 189,558. Fisher Bros. Paper Company, Fort Wayne, Ind. For toilet paper and wrapping paper.

SAKURA—No. 189,556. Fisher Bros. Paper Company, Fort Wayne, Ind. For toilet paper.

STURDIPAK—No. 189,481. George O. Slingerland, Mechanicsville, N. Y. For paper boxes.

WENO—No. 189,390. Consolidated Paper Box Manufacturing Company, Richmond, Va. For paper boxes, paper bags and paper trays.

TARZAN KRAFT—No. 189,290. American Mills Company, Atlanta, Ga. For paper bags.

CERTIFIED KRAFT—No. 189,292. American Mills Company, Atlanta, Ga. For paper bags.

TYPOCRAFT—No. 188,392. The Union Paper and Twine Company, Detroit, Mich. For paper used for correspondence.

WENO—No. 189,391. Consolidated Paper Box Manufacturing Company, Richmond, Va. For printing and writing papers, wrapping paper and pencils.

HYGULOID—No. 176,549. Hygienic Tube Company, Newark, N. J. For nitrocellulose products.

PIEDMONT—No. 188,356. Wortendyke Manufacturing Company, Richmond, Va. For toilet paper, paper towels, etc.

ORANGE—No. 188,982. Yellow Pine Paper Mill Company, Orange, Tex. For wrapping paper.

W W P Co—No. 189,082. Wax-Wrap Paper Company of Texas, Dallas, Tex. For waxed wrapping paper.

No RIVL—No. 189,613. Fort Howard Paper Company, Green Bay, Wis. For toilet paper, paper napkins, paper towels, etc.

NUNXL—No. 189,614. Fort Howard Paper Company, Green Bay, Wis. For toilet paper, paper napkins, paper towels, etc.

PERFEX—No. 189,957. Vickers, Ltd. Sheffield and London, England. For folded or foldable cartons, boxes, containers, etc.

A SERIES OF PERFORATIONS ON A FLAT SURFACE—No. 183,864. United States Envelope Company, Springfield, Mass. For toilet paper.

WARRENFOLD—No. 187,651. S. D. Warren Company, Boston, Mass. For printing paper.

Whitmore Co. Receiver Reports

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., February 19, 1924.—George Webster who was recently appointed receiver for the Whitmore Manufacturing Company today filed his report in the Superior Court at Springfield. Orders of notice to the creditors and also to other parties interested have been issued returnable February 29. Attorneys Avery Gaylord & Davenport appear for the Fitchburg Paper Company, the petitioners for a receivership, and Attorney John S. Bagley for the Whitmore Company. The report follows:

Your temporary receiver respectfully represents that he has been operating the Whitmore Manufacturing Company under decree of this court since December 20, 1923 a period of substantially eight weeks. During this period he has sold and delivered paper products to the value of $42,858.31 that he has on his books at this date uncompleted orders to the amount of $10,078 for paper products, that there are no receiver's certificates now outstanding; that there is nothing due on account of the receivership operation of this plant but accounts payable of $3,239.72, accrued payroll of $500, salaries of $230, mortgage interest of $838.68; and your receiver has on hand cash of $427.66; and your receiver says that there is due him on accounts receivable placed on his books as temporary receiver by him from the operation of the plant of the Whitmore Manufacturing Company $28,618.35; that your temporary receiver has on hand paper products raw wrought and in process approximately $45,088.39; land buildings and machinery equipment, furniture and fixtures of a total value of $270,150.90, the said land buildings and machinery being subject to a mortgage of $100,000 to the Holyoke Savings Bank.

"Your temporary receiver has spent for operation of the plant during the period covered by this report including heat, power, light, labor, salaries, wages, material, supplies, office expenses and counsel $40,128.60, which amount includes $15,110.86 received by him on accounts placed on the books of the Company previous to the receivership which accounts has been assigned to the First People's Trust Company of Boston and which accounts were ordered to be paid by this court to the People's Trust Company; that he has received during the period $40,556.28 which includes the $15,110.86 which he paid to the First People's Trust Company in accordance with the foregoing."

R. T. Vanderbilt Co. Takes Over McNamee Clay Sales

The R. T. Vanderbilt Company announces that a new corporation, the North American Clay Company, has been formed, which has taken over the McNamee Kaolin Corporation at Bath, S. C., and the Continental Clay Company at Langley, S. C.

Extensive improvements are already under way and a new plant is being built. It is planned not only to increase the production but to carry in stock large reserves of finished clay to insure prompt service and shipments to the paper trade. This new operation will be of considerable interest to the paper mills, as the McNamee mine has been in operation since 1868 and the product has been used for paper filling for many years.

These investments are being made not only to insure prompt and dependable service but also a supply of carefully graded clay suitable for filling the best grades of white paper.

The new company will control one of the largest known deposits of white clay, the tonnage having been estimated as high as 15,000,000 tons. The clay sales will be handled exclusively by the R. T. Vanderbilt Company, New York.

Goes With Southern & Paper Co.

CHATTANOOGA, Tenn., February 18, 1924.—Thomas Duff has resigned as superintendent of the Beebe & Holbrook Division of the American Writing Paper Company at Holyoke, Mass., to become superintendent of the mill of the Southern Cotton and Paper Company at Albin Park.

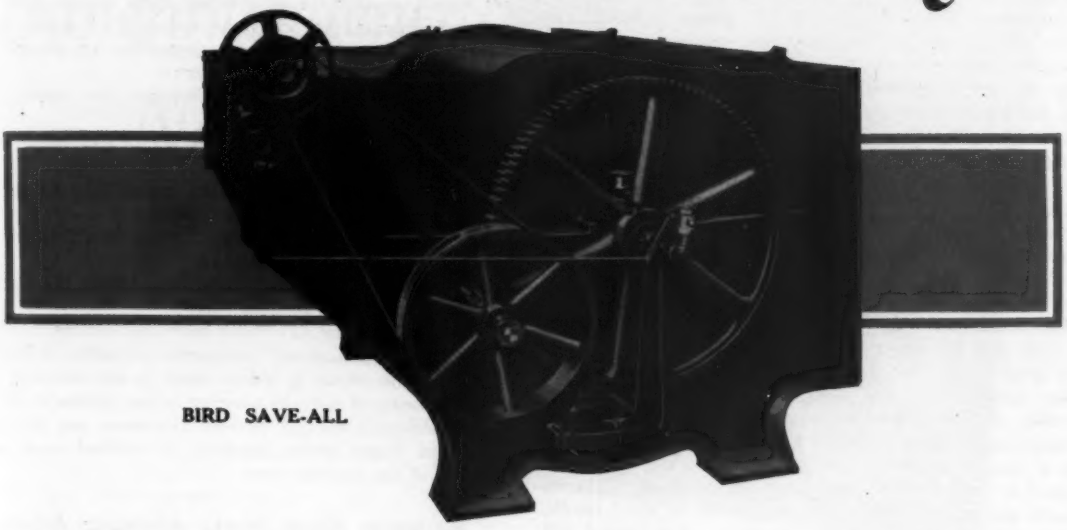
The Southern Cotton and Paper Company will manufacture a medium priced rag base bond, a 100 per cent rag book and all cotton blotting paper.

Pejepscot Paper Running Full

[FROM OUR REGULAR CORRESPONDENT.]

BRUNSWICK, Me., February 18, 1924.—With the exception of one machine, all of the paper machines in the three mills of the Pejepscot Paper Company of Brunswick are now running on a full time schedule for the first time this year. The Lisbon Falls plant has been closed down for six weeks and the Bowdoin mill has been closed much of the time. The present outlook is for a long run.

How to Save More Stock



BIRD SAVE-ALL

CONSIDER Bird Save-Alls as Watch Dogs which guard against loss of stock in your mill. In this capacity they recover practically all of the valuable fibres in the white water, returning them to the system for immediate use.

But they perform still another important service. They detect leaks.

When Bird Save-Alls are rolling off a thick sheet of pulp they are not only saving stock but are signalling in unmistakable language that somewhere in your white water and stock handling system there is a costly leak.

Experience has shown that the way to save more stock is to install enough Bird Save-Alls to handle the entire flow from your mill and then watch them carefully for indications of leaks.

Write for the Bird Save-All Catalog.

6204

BIRD MACHINE COMPANY
SOUTH WALPOLE
MASSACHUSETTS

Western Representative
T. H. Savery, Jr., 1718 Republic Bldg.
Chicago, Ill.

Canadian Builders of Bird Machinery
Canadian Ingersoll-Rand Co., Ltd.
260 St. James Street
Montreal, Canada

Obituary

David G. Garabrant

David G. Garabrant, senior member of the firm of Bulkley, Dunton & Co., of 75 Duane street, New York city, died at 4 o'clock last Tuesday morning at his home in Bloomfield, N. J.

Mr. Garabrant started in the paper business in New York city in 1864 and became a member of the firm in 1876. The firm was originally known under the name of Cross, Bulkley and Gowkin, having been established in 1833.

The deceased was born in New York city but went with his parents to live in Bloomfield, N. J., when he was four years old. That had been his home ever since. Last October he celebrated his seventy-seventh birthday, enjoying a remarkable degree of physical fitness at that time. He remained an active business factor in the concern of Bulkley, Dunton & Co., almost to the last for it was not until a week ago that he suffered a general breakdown. A week ago Tuesday he went to Heightstown, N. J., where he delivered an address on Founders' Day at the Pettie School for Boys of that place, of which he was the president of the board of trustees.

The following day he suffered the breakdown which eventually resulted in his death. He held a score of positions of honor and trust, among which may be mentioned the presidency of the board of trustees of the Pettie School for Boys at Heightstown, N. J., the presidency of the Bloomfield, N. J., Savings Bank, a director of the Bloomfield, N. J., National Bank. He was also a leader in the work of The National Baptist Conference.

Mr. Garabrant was a man of large heart and of warm sympathies. He was not only a great church man but a practical Christian gentleman whose charitable and philanthropic characteristics were easily touched by every worthy cause that came to his attention. He was one of the progressive spirits of his hometown, being active in every good work that touched the community's welfare. During the war he was one of the first to put his shoulder to the wheel, devoting his energies to selling Liberty Loan bonds and to such other war activities as he could handle.

He is survived by a son and two daughters. The funeral will be held at 3:30 this afternoon at the First Baptist Church of Bloomfield of which he was a member and the interment will be in Bloomfield.

George A. Howell

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., February 18, 1924.—The death took place in Toronto on February 15 of George A. Howell, president of the Howell Warehouses, Limited, in his sixty-third year. He had been in poor health since last September. Mr. Howell was well known throughout the paper industry, having carried on for many years a rag and paper stock business, shipping large quantities of supplies to the American and English markets. He was in the publication business for some time and was manager several years ago of Grip, Limited. He took an active part in all public affairs and was one of the founders of the Canadian Club of which he was a former president. Mr. Howell was also a member of the Rotary and National Clubs. His charitable work included the chairmanship of the 1921 campaign of the Federation of Community Service. Mr. Howell is survived by his wife and one daughter and his funeral was largely attended by members of the pulp and paper industry.

Paper Exportation Information

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 6, 1924.—Paper manufacturers interested in the exportation of paper and its products can always obtain detailed information concerning this traffic from the Paper Division of the Bureau of Foreign and Domestic Commerce, according to a statement issued by the bureau. In addition to printed reports known as Trade Information Bulletins published from time to time covering specific markets and special data prepared on individual request, a series of monthly statements is issued which give preliminary statistics showing the quantity and value, by both countries and commodities, of all paper and paper products exported to foreign markets during each month.

This information is contained in printed statements published in two parts known as the Monthly Summary of Foreign Commerce of the United States and in certain supplemental statements, mimeographed for distribution, covering specific commodities. The Monthly Summary, while showing the quantity and value exported of each of the various commodities, does not indicate the countries of destination except in the classes "News Print" and "Book Paper" and only to a limited extent for those items.

To supplement this data, the six special Statistical Statements are issued covering the 18 principal items on the paper schedule and indicating in each class the countries of destination. For convenience, two, three, or four commodities are grouped on each statement and in the following order:

(1) News print paper, (2) Book paper (not coated), and (3) Surface coated paper;

(1) Bristol and Bristol board and (2) Paper board and Straw board;

(1) Greaseproof and Waterproof paper, (2) Kraft wrapping paper, and (3) Other wrapping paper;

(1) Cover paper, (2) Writing paper, except papeteries, (3) Envelopes, and (4) Papeteries;

(1) Tissue and crepe paper, (2) Toilet paper, (3) Paper towels and napkins, and (4) Blotting paper;

(1) Paper bags and (2) Paper boxes and cartons.

With these preliminary statements available, information is obtainable from month to month which is not otherwise published until the release of statistics covering twelve months in the bureau's yearly publication entitled Foreign Commerce and Navigation of the United States which, ordinarily, is released some time after the close of the calendar year.

Mathieson Alkali Works Announce Advances

"The Mathieson Alkali Works, Inc., 25 West 43rd street, New York, announces a further advance in its prices for Liquid Chlorine and Bleaching Powder, effective February 14th, 1924, to apply on all business for future delivery taken after that date, as follows:

Bleaching Powder for spot sales and contracts for future delivery in carloads.

$1.75 per 100 lbs. in standard (700 lb.) drums, f.o.b. Niagara Falls.

$2.00 per 100 lbs. in small (300 and 400 lb.) drums, f.o.b. Niagara Falls.

Shipments in less than carloads, spot or contract, fifteen cents per 100 pounds above these prices.

Liquid Chlorine for spot sales and contracts for future delivery in tank car lots and in cylinders.

$4.00 per 100 lbs. (Single Units or Multi Units), f.o.b. Niagara Falls.

$5.00 per 100 lbs. in cylinders, in carload lots, f.o.b. Niagara Falls.

$5.50 per 100 lbs. in cylinders, for sales of more than one ton f.o.b. Niagara Falls.

$6.00 per 100 lbs. in cylinders, for sales of one ton and less, f.o.b. Niagara Falls.

Great Lakes Paper Company

Good progress has been made in the construction at Fort William, Ont., of the plant of the Great Lakes Pulp and Paper Company. Work is also proceeding rapidly on the construction of a hydro line to the plant and it is expected that the plant will be completed about the end of March.

A Book Every Mill Superintendent Needs

Just off the press is the Columbian Book of Rope Transmission—a practical book beautifully illustrated containing exactly the information the average mill superintendent has long felt the need of. It tells in understandable English not only the fundamentals of successful Rope Drives and their advantages but many of the essential details contributing to absolute satisfaction.

While Columbian Transmission Rope is the best we know of, still, the book is not published for the selfish purpose of exploiting our own make,—but to be of genuine value to mill owners and superintendents who want their Drives installed right and kept running right.

There is no charge whatever made for this book, nor is there any obligation incurred by sending for it. If you have a Rope Drive, or intend installing one, by all means write for your copy today, using your firm's letter-head. We will cheerfully send the book postpaid, without any obligation or cost to you.

Columbian Rope Company

342-60 Genesee Street

Auburn, *"The Cordage City"* N. Y.

Branches: New York Chicago Boston New Orleans

New York Trade Jottings

George Gair, president of the Robert Gair Company, is out of town for a few days.

* * *

Jack Galewitz, manager of the Great Atlantic Paper Company is spending a vacation at St. Petersburg, Fla.

* * *

Buck, Kiaer & Co., Inc., importers of Scandinavian and Middle European wood pulps have removed to their new offices at 9 East 46th street. They have recently been appointed agents for this country of the Greaker pulps.

* * *

The Canadian Export Paper Company, Limited, has removed its New York office from 366 Madison avenue to the Park Lexington Building, 247 Park avenue. The company occupies rooms 1902-3 and its telephone numbers are Vanderbilt 4677 and 10432.

* * *

John Traquair, director of the research laboratory of the Mead Pulp and Paper Company, Chillicothe, Ohio, sailed Saturday for France and England, where he will investigate several new developments in the paper industry. H. P. Carruth, general manager of the Mead Pulp and Paper Company accompanied Mr. Traquair to New York.

* * *

The American Sole and Belting Leather Tanners, Inc., 17 Battery place, has published an attractive booklet telling "The Romance of Leather" and showing its importance to mankind. The booklet has been put out for educational purposes and those into whose hands it falls will be surprised at the revelations made by this story of leather and the many uses to which it is put for which there is no substitute.

* * *

The Purity Paper Vessels company of Baltimore, manufacturers of the Purity paper cans and paper bottles, opened their New York sales office on February 1. It is conveniently located at 342 Madison avenue, Room 526 AA, Canadian Pacific building. The telephone is Vanderbilt 1809. The office is in active charge of William A. Palmer. While W. R. Lenderking, vice president and general manager, will still maintain his executive office at Baltimore, he plans to be at the New York office on Friday and Saturday of each week.

* * *

The 45 United States companies reporting to the News Print Service Bureau produced 128,772 tons of newsprint during January and shipped 123,253 tons, the 20 Canadian companies produced 109,875 tons and shipped 107,966 tons, making a total production of 238,647 tons and shipments of 231,219 tons in both countries. These companies also produced 1,750 tons of hanging, of which 532 tons, were made in Canada. Production exceeded shipments in United States by 5,519 tons and in Canada by 1,909 tons. Stocks at the end of January totaled 28,417 tons in the United States and 16,493 tons in Canada, a combined total of 44,910 tons which is equivalent to 4.5 days' average production. Comparing production of 55 identical companies during January 1924 with that of January 1923 the United States companies show an increase of 2,324 tons or 2 per cent, the Canadian companies an increase of 10,538 tons or 11 per cent and the total of all these companies shows an increase of 12,862 tons or 6 per cent. The average daily production of news print paper by these 55 companies reporting for January amounted to 91.9 per cent of the average daily output during the three months of greatest production in 1923, with allowances for changes in machines.

Every buyer and seller of paper should have a copy of Lockwood's Directory of the Paper Trade.

John Waldron Corp. Organized

A record probably without parallel in the industrial business of this country is that of the John Waldron Company, New Brunswick, N. J. Founded in 1827 this business has since been in continuous operation and has never experienced a shut-down other than holidays and Sundays.

It has never been reorganized and has remained in control of three generations of the "Waldron" family. It was never found necessary to seek assistance of outside capital, and even in the dullest periods the Company, has always had sufficient orders on hand to keep its force of four hundred (400) men fully employed and has generally been a year behind in orders.

Beginning with the invention and manufacture of special machinery for paper products, the field has broadened, new industries have arisen depending on the Waldron Company for the special machines required until today although the "Waldron" machines are known and used throughout the civilized world, it is doubtful if any one user has realized the small proportion of the Waldron business that his own particular industry provides.

The wall paper manufacturers know this concern makes wall paper machinery, coating manufacturers identify them as manufacturers of coaters and reels and hang-up machines, the linoleum manufacturers know them to make machinery for making linoleum and printing Congoleum rugs, while others know them as makers of machinery for artificial leather, film, textile printing, paper calender rolls, etc. The power and steel companies know them as manufacturers of the "Franke" flexible couplings.

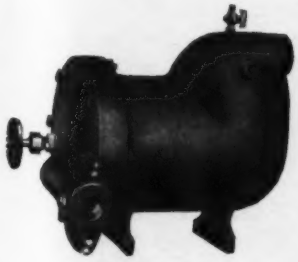
The drying of products made on these machines gradually became one of the important features, and for many years the John Waldron Company has worked in close cooperation with the J. O. Ross Engineering Corporation on its drying problems. The advance and development in the making of drying machines has practically kept step together and the demands became apparent for the manufacturing of these products under one management. As a result the John Waldron Corporation has been organized to take over the entire business of John Waldron Company, a large financial interest having been acquired by J. O. Ross Engineering Corporation.

The latter concern is best known as the maker of "Briner" economizers, vapor absorption systems, heating and ventilating and drying systems for paper mills. It will handle all the engineering and sales promotion of the new John Waldron Corporation with the exception of "Franke" flexible couplings. This new arrangement now makes it possible for one concern to handle the entire equipment problems for these large and important industries.

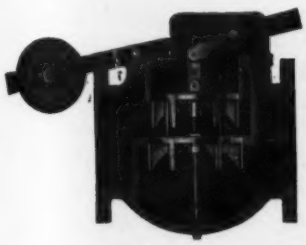
New Zealand International Exposition

An International Exhibition is to be held in Dunedin, New Zealand, opening about November 1, 1925. Though an exhibition company has been formed for convenience of organization, the undertaking is being planned and supported on the widest basis. The New Zealand Government has given its patronage to the project, and is also assisting it financially. Though New Zealand is one of the youngest of the British Dominions, it has made great progress in less than a hundred years. Its people numbering now, roughly, a million and a quarter, have striven with the conscious aim of building a New Britain under southern skies, and it is wonderful what progress they have achieved. This will be their fourth International Exhibition. The first held in Dunedin in 1865, was naturally restricted in its scope, but at the second, also held in Dunedin in 1889-90, half a dozen foreign countries, in addition to the United Kingdom and British Colonies, were represented. The third International Exposition, held in Christchurch in 1906-07, was a great success and it is to be expected that the new exhibition, to be held a year hence in one of the fairest cities of what is certainly one of the most beautiful dominions of the whole Empire, will surpass all previous records.

No. 1 Piston Type Pressure Regulator



Improved Continuous Discharge Steam Trap



Patented Noiseless Back Pressure Valve

SOLVE YOUR Valve Specialty Problems By Specifying KLIPFEL-SWAN SPECIALTIES

Since 1902 the Klipfel Manufacturing Company has manufactured Klipfel-Swan Valve Specialties for controlling Pressure, Temperature and Humidity. These devices—simple, rugged and dependable are the embodiment of good design and careful workmanship.

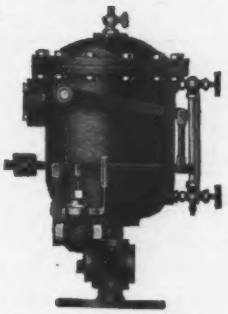
Quality Products

The modern Klipfel plant makes possible the quality and quantity production of these specialties. For over 20 years Engineers specifying Klipfel-Swan products have found that they give maximum performance for minimum attention and maintenance expense.

Illustrated Catalog No. 20 is yours for the asking. Send for it!

Klipfel Manufacturing Co.
2641-59 West Harrison Street,
ADVERTISING DEPT. Chicago, Illinois

No. 2 Piston Type Pressure Regulator Expanded Outlet

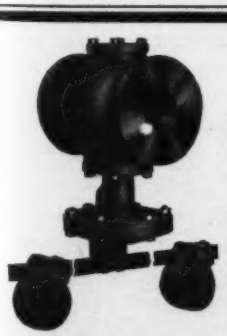


Automatic Pump Regulator and Condensation Receiver

Balanced Float Valve with Seamless Copper Float

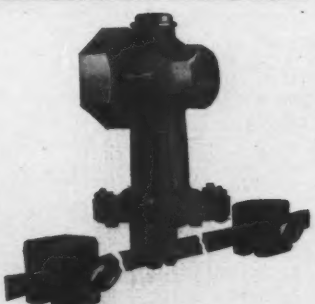
Klipfel-Swan Specialties

for controlling Pressure, Temperature and Humidity



No. 3 Diaphragm Type Pressure Regulator

Water Level Controller For Water Tank used in Connection with our Balanced Lever Valve



No. 4 Diaphragm Type Pressure Regulator-Expanded Outlet

Editorial

Vol. LXXVIII New York, February 21, 1924 No. 8

HENRY J. BERGER, Editor

PAPER EXPORTS INCREASE IN 1923

The exports of paper from the United States during 1923 amounted to $25,677,685, showing an increase of slightly more than one and one-half million dollars over 1922, according to an analysis of exports for last year just completed by the Paper Division of the Department of Commerce.

An analysis of these statistics, however, says the Paper Division, indicates that the difference was due to an increase in the average price obtained rather than in quantity and that radical changes occurred not only in the relative importance of foreign markets but in the comparative demand for the various items. Due probably to low prices quoted by European competitors, a substantial decrease is to be noted in exports from the United States to South America, as well as in the totals of such classes as news print, wrapping (other than kraft), paper bags, and the cheaper grades of writing paper. These decreases, however, were more than offset by increased shipments to the Far East and by gains in book paper and kraft and such specialties as boxes and cartons, paper and straw board, grease and water proof papers, tissue and crepe papers, hanging papers, carbon paper and wall board.

The greatest decreases in news print, which declined 36 per cent in volume and 30 per cent in value during 1923, occurred in South American markets, which received 1,915,867 pounds valued at $99,719 in contrast to 17,660,449 pounds valued at $749,342 during 1922. The greatest single loss was in shipments to Argentina which, during 1922, accounted for more than two-thirds of the total South American tonnage, and only 1,320 pounds in 1923. Exports to other South American countries also declined, the smallest decrease occurring in the total for Venezuela. Shipments to Cuba during 1923, valued at $925,156, represented an increase of more than $100,000 while the total for the Philippines advanced from $186,732 in 1922 to $215,975 in 1923. Japan and China were second and third in importance in the Far East, exports to these countries in 1923 declining to $75,899 for Japan and $7,265 for China, representing a decrease of approximately $85,000 in the former market and of $57,000 in the latter.

Unlike news print, the value of book paper exports increased approximately $200,000 in 1923. Cuba was the chief market with more than seven million pounds valued at $752,729, about $175,000 more than in 1922. The total for Mexico, $232,317, represented a loss of more than $10,000 compared with the preceeding year. Exports of book paper to South America also decreased, though not to the extent indicated for newsprint, total shipments for 1923 being valued at $446,728, or $88,000 less than the value in 1922. The Brazilian market accounted for the greater part of this loss, the total value for this class declining from $158,000 in 1922 to $92,130 in 1923. A slight increase was reported in shipments to Peru which were valued at $42,664. In the Far East, which received book paper to the total value of more than $800,000 gains made in the markets of China and British India offset, with a negligible difference, decreases in the Philippines and Japan.

A decline of 16 per cent in quantity and 9 per cent in value is noted in exports of writing paper during 1923. The greatest decrease occurred in Canada, the value of book paper imported from the United States decreasing from $131,839 in 1922 to $82,255 in 1923. Other important decreases are noted in exports to Mexico during the past year amounting to $105,941, or $25,000 less than the total for the preceeding year, and in shipments to Brazil valued at $50,060 in 1922 and only $14,290 in 1923. The total of $193,827 shown for the Philippine Islands is also less than the 1922 total by about $57,000, but exports to India, China, and Japan increased in both quantity and value during 1923, shipments to India being valued at $20,728 and to the last-mentioned countries at $152,804 and $74,974, respectively, more than offsetting the decrease indicated in the Philippine market.

Nearly 50 per cent of the paper and straw board exports, which increased in both quantity and value during 1923, were shipped to Canada. Notwithstanding the fact that this market received nearly two million pounds less than in the preceeding year the total value was increased by more than $100,000 exports to Cuba valued at $288,510 during 1923 practically doubled the 1922 total and a moderate advance is also indicated in the Mexican market. Excepting Colombia, the year 1923 showed a decline for this item throughout South America. Exports to China showed an important increase in quantity and advanced in value to $650,885, a gain of nearly $300,000 while Japan gained approximately ten thousand dollars in value. Shipments to Australia and New Zealand decreased both in quantity and value.

Though sales of wrapping paper (other than kraft) in foreign markets decreased nearly 20 per cent in volume, better prices brought the values up to substantially the 1922 level. The chief losses occurred in Latin American markets, particularly in Cuba where the total value reached only $321,741, compared with $597,738 in 1922. Exports to England, Canada, and Central America, however, increased as well as those to Japan and the Philippine Islands but not sufficiently to offset entirely the decreases in other markets.

Exports of American kraft are still relatively small but have increased both in quantity and value during the past year. Canada was the most important market and received nearly one-third of the total exports which were valued at $79,737.

An examination of the total exports for all classes by quarters shows a relatively even distribution throughout the year, the peak in 1923, being reached during the second quarter and not in the third, as in 1922, which was due to the largest monthly total occurring in June for 1923 and in July for the preceeding year. Notwithstanding the fact that shipments of certain items, including book paper, paper and straw board, photographic paper, wrapping paper (other than kraft), and playing cards, decreased during the last quarter sufficiently to bring the total for that period under the quarterly average, the majority of the classes show an increase in both quantity and value and have maintained their position up to the end of the year. In view of the keen foreign competition encountered by American exporters in the paper markets of the world, favored as it is, by low production costs and advantageous exchange rates, the continued increase realized in total paper exports is not only encouraging but complimentary to the paper exporters of the United States.

THE STRENGTH OF THE UNIONS

The question as to just how correctly and just how fully the American labor unions represent the opinions of American labor is an interesting one and some striking conclusions result from a study of statistics which bear on the case.

Back in 1920 the labor unions of America reached their top-notch strength as represented by the "closed shop." Then their total membership was over 4,900,000. Of this total 83 per cent or 4,078,740 were affiliated with the American Federation of Labor.

Today the total union membership in the United States is about 3,730,000, which cuts down the peak figures nearly one fourth or about 1,170,000. The membership of the American Federation of Labor as reported at the 1923 convention was 2,926,500 which represented a loss of 269,000 in 15 months. And this loss is in spite of the fact that the volume of employment was steadily increasing during that period.

When figures as to organizable workers are compiled similar results may be arrived at from a different angle. In 1920 the census figures showed the number of people "gainfully employed," after subtracting those not eligible to unionization, to be about 17,500,000 which represented the potential union strength of labor. The total membership of the unions in 1920 was, therefore, about 28 per cent of the number organizable.

In 1923 the number of union employees had still further decreased to about 20 per cent of the eligibles.

The ratio for 1923 is difficult to ascertain because of the absence of census figures. The National Association of Manufacturers concludes, however, after studying all available data, that there was a marked increase in productivity during 1921 but a let-down since then.

And yet, after making all allowances, the Association estimates the number of "organizables" for 1923 at 18,836,906. Only one in five of these is unionized.

It can be seen, therefore, that the unions do not fairly represent the 100 per cent opinion of American labor. When at the peak of their power the unions represented but a small percentage of the workers of America.

However, in certain industries the unions are exceptionally strong and the power of the unions is therefore vastly out of all proportion to the ratios shown by the figures quoted above.

Maine Paper Man to Protest Rates on Pulpwood

[FROM OUR REGULAR CORRESPONDENT.]

AUGUSTA, Me., February 19, 1924.—Maine pulp and paper mills have joined in a protest to the Public Utilities Commission of Maine against an increase of rates by the Maine Central railroad for hauling pulpwood. The Public Utilities Commission has ordered a hearing on the complaint at the state house February 28, at 10 a. m. The new schedule went into effect on February 5, 1924, and the companies affirm that because of the fact that three heavy increases were made during the war, with a reduction of only 10 per cent since that time, that the increase now is not justified.

Joining in the protest are the Oxford Paper Company, The S. D. Warren Company, Eastern Manufacturing Company, Orono Pulp and Paper Company, Penobscot Chemical Fiber Company, Advance Bag and Paper Company, Poland Paper Company, Maine Coated Paper Company, Nekonegan Paper Corporation, Pine Tree Pulp Company, Keyes Fiber Company, Skowhegan Paper Company, Androscoggin Pulp Company, Gilman Paper Company and Cushnoc Paper Company and Kennebec Paper Company.

Will of George E. Bardeen

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., February 13, 1924.—The will of the late George E. Bardeen, of Otsego, paper mill magnate and financier, has been filed for probate in the Probate court of Allegan County, Allegan. It disposes of his entire fortune to members of his immediate family, naming his widow, Florence Geib Bardeen as executor under the will.

While no official statement regarding the extent of the estate of the deceased has been made, it is generally known that Mr. Bardeen was one of the wealthiest men in southwestern Michigan. The value of his holdings are conceeded to be in excess of $1,000,000.

The three chief beneficiaries are his widow, Mrs. Florence Geib Bardeen; a daughter, Mrs. Margery Bardeen McClellan and a son, George Edward Bardeen, Jr. Each receive a third of all manufacturing, bank and other stocks. The widow is given the use of the palatial homestead in Otsego for life, also the Lucy Travis house adjoining, all life insurance and other real or personal property not otherwise disposed of. Margery Bardeen McClellan is given the home she occupies while the son is given two houses and lots immediately adjoining the McClellan home.

On the death of the widow, the Bardeen homestead is to pass to Mrs. McClellan and from her to the son, providing he survives his sister. The will states "my wishes are that the homestead be held in the family and be used for the family."

The original will leaves three bequests of $20,000 cash each to Margery Bardeen McClellan, grand daughter; Dorothy McClellan, grand daughter and George Edward Bardeen III, grandson. A codicil, dated August 2, 1919, gives a like sum to Berton Lane Bardeen, grandson.

Three bequests of $10,000 each are made payable to a brother, Charles William Bardeen, Syracuse, N. Y., and to his half-sisters, Alice Gertrude Haskell and Edith Gibson Hodge, both of this city.

Mr. Bardeen was very heavily interested in the MacSimBar Paper Company, Allied Paper Mills, Wolverine Paper Company, Lee Paper Company, Kalamazoo Stove Company, Kalamazoo Malleable Iron Company, Kalamazoo Laundry Company, Globe Casket Manufacturing Company, while he also had connections with numerous other concerns to a lesser extent.

To Teach Consumers of Paper

Teaching the public the principle of using the right kind of paper for the specific requirement of the various consumers is the ideal of the Paper Industries Exposition to be held at the Grand Central Palace the week beginning April 7.

This ideal was explained in a recent letter of the Exposition management to a big paper manufacturer, as follows:

"As we see it, it is the paper manufacturers' job to sell paper to the consumer—your own job. The clearly defined policy of the Exposition is to educate the consumer and create in him a desire and a demand for finer and better paper.

"Do you realize the number of advertising men, direct mail men, printers, publishers and—just consumers, shall we say, who attend the show? If you did, there would be only one decision to make."

Figures from the Exposition last year tell of literally tens of thousands who attended the big Paper Show, and at least one big paper manufacturer who exhibited has been able to trace a large amount of business directly to its exhibit—enough in directly traded sales to more than make up the entire cost of the display.

The general policy of the Exposition is a three-fold division of the space into departments containing machinery for the manufacture of paper, exhibits of paper itself, and the third the department devoted to the manufacturers of paper. If the management desired, all the space available could be sold to the paper making machinery and supply houses, but the feature side of the Exposition will be the departments in which the consumers of paper and its products are directly interested.

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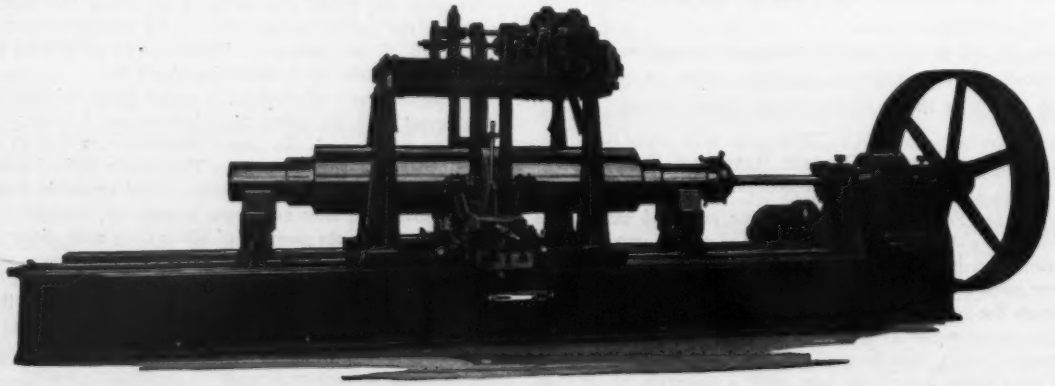

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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

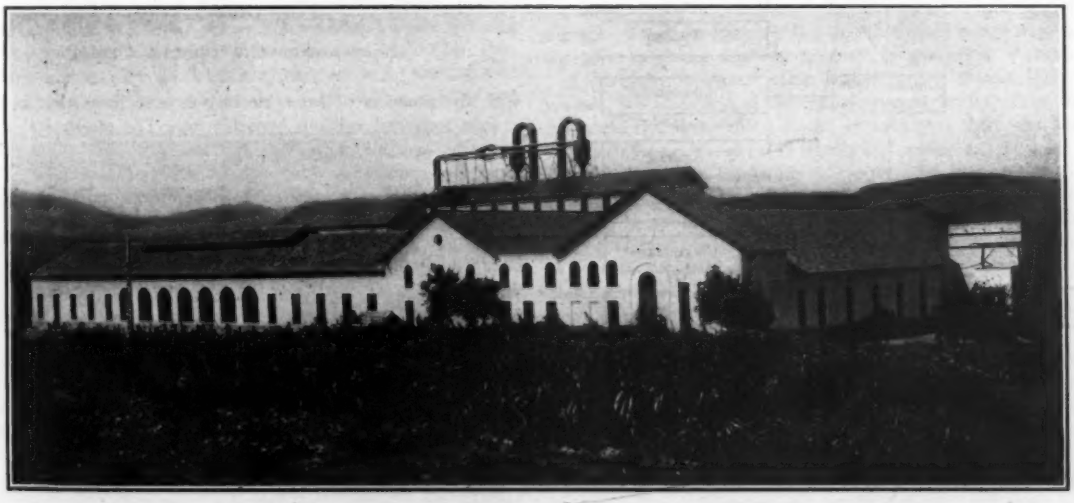
DE VAINS PROCESS FOR PAPER PULP FROM WASTE FIBROUS MATERIALS*

How European Mills Utilize Such Fibers as Straw, Bagasse and Bamboo for High Grades of Paper

By J. F. Clerc

Within a few years necessity is likely to force American industry to utilize materials other than wood for the commercial production of pulp suitable for making paper. At present we are using such fiber wastes as wheat straw for making rough cardboard, but as far as is known no mill in America is turning out high-grade paper from such material. Under conditions prevalent in Europe and India, however, where satisfactory wood for pulping has been scarce for many years, attempts to make a fine grade of paper from straw and the like have met with success. The process, invented by a French engineer, A. R. De Vains, consists of successive treatments of the raw material with dilute caustic soda, chlorine hydrate and bleach. Essentially it is an industrial application of the classic method of Cross and Bevan for the isolation of pure cellulose.

One of the merits of the process is that practically equivalent amounts of chlorine and caustic are required. In other words, an independent chemical plant buying only salt and lime is enabled to meet the full requirements of the pulp mill. Practice has shown that 85 to 90 per cent of the cellulose of the straw is convertible to useful pulp—a figure that compares very favorably with the yields obtained in the standard processes of wood digestion. That the De Vains method is extremely simple, that it is highly efficient in chemical, heat and raw material utilization is not generally understood, largely because so little has been published in English on the subject. For that reason we are pleased to present in this issue a discussion of its merits and of the possibility of its application here. This has been written by a Swiss chemical engineer, J. F. Clerc, who has had experience in building and operating two of the six plants that are operating abroad.



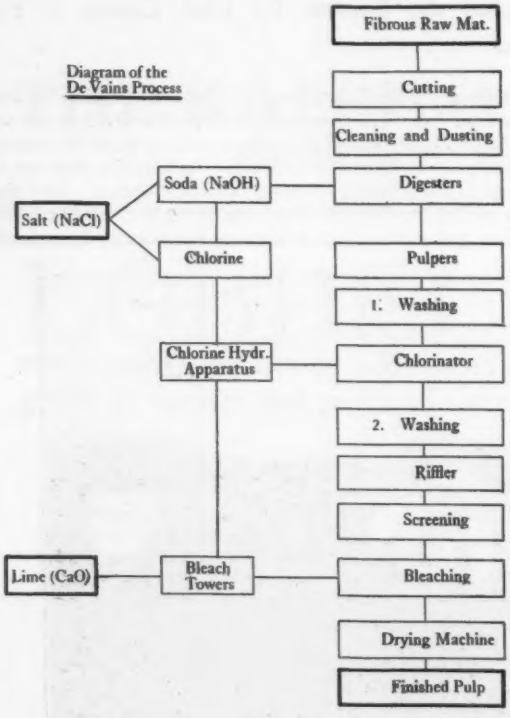
Spanish Plant at Benalua

It is difficult properly to appraise this process in its relation to American conditions. The United States alone produces about 600,000 tons of flax straw capable of yielding high-grade pulp and

* Chemical and Metallurgical Engineering, New York, February 18, 1924.

roughly 70,000,000 tons of other straws capable of making a medium grade. In addition to this straw there is available a large amount of bagasse, entirely suitable for utilization by the same means. Unfortunately the existence of large amounts of useful material does not imply availability. Because of gathering and transportation costs only a fraction of the total amounts can be brought in to centrally located mills. Again, the apparatus required for preparation of the fiber, for digestion and most especially for chlorination precludes the possibility of directly converting pulp mills now operating on other processes. Further, the logical centers for mills using wood and for those using straw are widely separated, and frequently in a grain country large supplies of satisfactory water are at a premium.

Although recognizing these difficulties, we must still face and solve the problem of continuing to make paper in this country indefinitely. A growing pulpwood shortage—we are using our wood four times as fast as we are replacing it—practically makes inevitable great increases in the cost of this raw material. It may or may not be that we shall treat straw by the De Vains process, but in any event it should prove profitable for us to consider with care a solution of the problem that has proved satisfactory under European conditions. One thing is certain: This method or another for gaining the same end must be developed for utilizing fibrous materials other than wood which are produced in this country.—Editorial from *Chemical and Metallurgical Engineering*.



FLOWSHEET SHOWING DE VAINS PROCESS

The De Vains process of pulp making is an industrial application of the old laboratory method for the isolation of cellulose, well known as the "Cross and Bevan method." It consists essentially of treating the material successively with chlorine and with caustic soda with intermediate washings until the fibers are entirely free from foreign materials and consists of cellulose alone. As when straw is treated in the laboratory by this method, a very high-grade cellulose fiber is the product of the industrial process. Approximately 30 to 40 per cent of the weight of most straws used is yielded in the form of finished pulp.

From a chemical point of view the whole treatment can be divided into four phases: Digesting, chlorination, treatment with alkali and bleaching. Fortunately these operations may be conducted

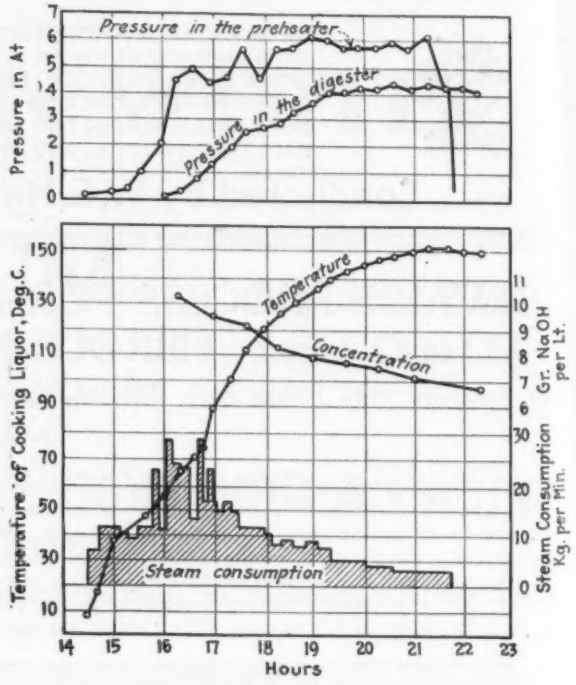


DIAGRAM SHOWING DIGESTIC OPERATION

with the products of brine electrolysis and lime—that is, chlorine, caustic soda and calcium hypochlorite. The mechanical details of digesting and bleaching in this process do not differ essentially from those commonly used in other processes. A nearly quantitative amount of reagent is used in digestion and chlorination. In digestion the effect is less vigorous therefore, but it is balanced later in the process by the action of the chlorine, which continues the breaking out of foreign materials commenced by the caustic in the digestion process.

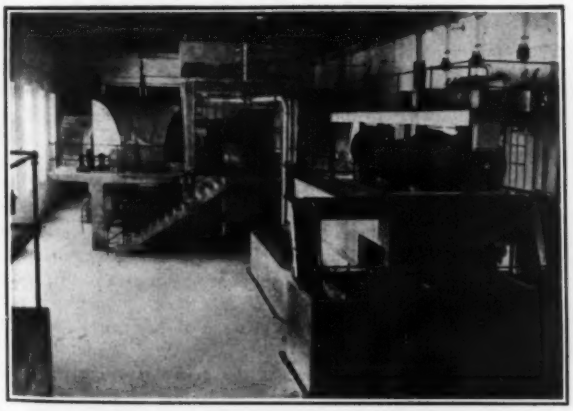
The straw for digestion is prepared by being cut into pieces approximately 1 in. in length in large rotary knife machines capable of turning out about 10,000 lb. per hour. After this operation the cut straw is treated in a centrifugal separator, which knocks out dust and useless particles. Conveyors then carry the raw material to the usual storage bin above the digesters. The cooking operation requires 10 to 12 hours for the complete cycle, charging, heating, cooking, relief, waste heat recovery, two washings in the digesters and dumping. Generally this takes place in stationary cylindrical, indirectly heated digesters holding 30,000 to 50,000 cu. ft. Provision is made for circulating the cooking liquor through a preheater by means of a pump and also for maintaining circulation of this through the digester in either direction. In this way very thorough agitation and uniform treatment are obtainable. Direct cooking might be employed, but it is avoided in order to make possible the use of a very weak liquor. The concentration actually used is about 12 to 14 grams caustic per liter. This is so low that it becomes necessary to avoid further dilution by the condensate of direct steam. In this process caustic equivalent to

about 8 to 9 per cent of the weight of the straw is used as compared with 14 to 18 per cent of the weight of wood used in the regular soda process.

The proportion of the total liquor to caustic soda used depends entirely upon the raw material being put through. In most cases, especially in the United States, this material would be straw. It is generally known that it is very difficult, if not entirely impossible, to give a fair average analysis of this raw material, as its composition varies enormously according to the country and the ground on which it is grown. The main factor to be taken into consideration is its cellulose content, but it is likewise important to estimate its proportion of silica, since it is the ratio of silica to total straw that determines the amount of soda that should be used in the cooking. If particular care is not taken in observing this point, an irregular quality of pulp and losses in yield will result. The influence of silica is felt much more decidedly when a minimum of soda is used, as is the case in this process. In the mills that have been operating abroad, it has been found possible to determine by observation how the straw is running in composition and to modify the digestion, chlorination and bleaching accordingly. Control of the digestion is made through analyses of the liquor from time to time and also from pressure-temperature observations. In general, straw with more than 4 per cent of silica, even with a relatively high cellulose content, is difficult to treat successfully. The following analyses made by Muller show how a few typical straws vary in composition:

	Winter rye	Winter wheat	Winter barley	Oats
Water	14.3	14.3	14.3	14.3
Organic, including cellulose	82.5	80.2	80.2	80.7
Ash, (largely silicate)	3.2	5.5	5.5	5.0
Cellulose	54.0	48.0	48.4	40.0

The purpose of the digestion is to dissolve part of the incrusting materials on the straw and to bring the material into a state that allows its separation into distinct fibers without unduly great expenditure of power. From the digesters the washed pulp is dropped to drainer pits, the liquor drained off and the stuff conveyed to disintegrators on endless rubber belts. Separation made in pulpers or kneaders, similar to a broke pulper, results from a rubbing action which tends to isolate the particles from one another rather than by a cutting action. By this means a more intimate contact with the chlorine in the following operation is obtainable. After the



Screens and Bleachers

fibers have been separated, a washing operation is carried out in rotary sieve drum apparatus which eliminates a great part of the remaining waste cooking liquor clinging to the fibers. Thus they are prepared for the action of the chlorine, which must be brought into intimate contact with every particle of fiber.

Heat Recovery System

In the De Vains process no soda recovery is required, as in the old soda or sulphate processes, where close to 80 per cent recovery is essential to commercial success. Consequently a great amount of heat was at first lost when the spent liquors were sent from the digestors to the sewers. At present means have been created to recover this waste heat and to utilize it for preparing hot washing water and for preheating the cooking liquor. Starting an operation with liquor near the boiling point brings several distinct advantages —the raw material is already soaked and softened during the charg-

Preheater and Circulation Pumps

ing period and the digester can be filled more completely—and also the time to obtain working pressure is reached in a shorter time.

A carefully designed waste heat recovery system therefore increases the efficiency of the installation decidedly. The heat diagram clearly shows this. It can be seen that there are only three sources of heat losses: (1) Radiation, which can be kept in reasonable limits by insulating preheater, digester and pipings (13 per cent); (2) the hot pulp, which necessarily contains a certain amount of heat with a part of the liquor attached to the pulp (24 per cent), and (3) the waste cooled liquor (20 per cent), which is sent to the sewer a little warmer than the temperature of the cooling water. This cooling water can be brought to a very high temperature and is used preparing fresh cooking liquor and for washing the pulp.

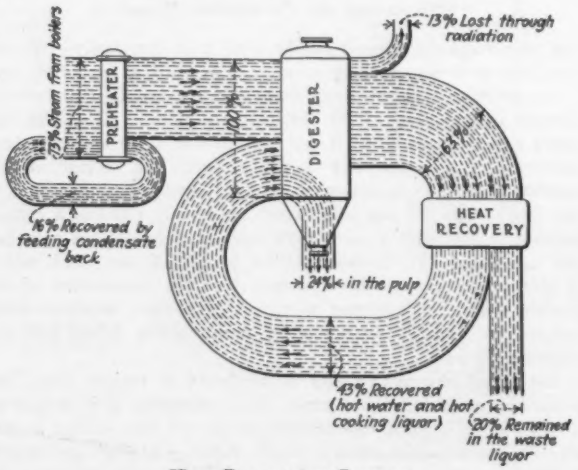
The actual chlorination may be conducted in various ways, but essentially the object is the same. As in digesting, it is desired to attack the foreign materials clinging to the cellulose without in any way disintegrating the cellulose itself. Ketone-Chlorides are formed in this operation. As formed, they are insoluble salts that must be rendered soluble by treating with alkali before they may be removed. The chlorinator is so arranged that following the action of the chlorine solution, the pulp is treated with caustic for neutralization and in this way the process is maintained continuously.

The apparatus here employed is gas tight—the pulp pumped in at a consistency of 5 to 7 per cent travels under pressure from one end of the chlorinator to the other. This flow is assisted by a specially designed paddle agitator. The chlorine-hydrate solution passes continuously through the apparatus, entering at the same point as the pulp and leaving the chamber with a chlorine concentration of very close to zero.

Chlorine has been added to the pulp in various forms. Cathaldi

has used it as a gas, but De Vains prefers a form closely represented by the hydrate ($Cl_2 8H_2O$). His patents cover the treatment of fibrous material with this compound, which is prepared in a relatively simple absorption system. This consists of towers in series, each filled with tile for increasing the contact of liquid and gas. The distribution condition is carefully fixed, as is the pressure and also the temperature. Although much criticized on theoretical grounds, the use of the chlorine-water compound thus prepared works out very satisfactorily in practice.

European mills working on this process produce chlorine and soda in their own electrolytic plants. The typical De Vains cell is similar in most respects to the Allen-Moore and operates with the same characteristics. Salt running out with the caustic is ordinarily carried through as such, although its separation by crystallization is recommended if the salt cost is high. The soda is stored as it is manufactured and used as needed, while the chlorine flows continuously to the absorbing installation and passes from this absorption system into the bleach-making system and in this way none is lost. Under unchanged conditions of pressure and temperature, the chlorine-hydrate solution will have a constant concentration (that is, as long as the gas is furnished in excess, as in this instance) and the total amount of chlorine fixed is ascertained by simply multiplying the concentration by the amount of water passing through the apparatus. It is readily understood, therefore, that the quantity of chlorine absorbed by the water is only a function of its supply. This adjustment, together with the control of the water supplied to the absorbing apparatus, makes possible the constant regulation of the chlorinating process to the required output of the mill. This treatment is also modified according to the qualities of the pulp shown as it comes from the preceding treatment. As the pulp passes from the chlorinators, a slight excess of chlorine is allowed to remain. The addition of alkali, as previously mentioned, neutralizes this excess so that the foreign materials (ketone chlorides) become soluble and also so that the equipment through which the pulp subsequently flows is not corroded by the chlorine



HEAT DIAGRAM OF COOKING

A thorough washing removes the salts formed from the pulp, and the shives, particles of roots and dirt are removed by treatment in screens and rifflers as in the usual process of pulp refining. The final step here consists of centrifugal screening in cages of fine wire that hold back all undigested fiber.

The last operation is the bleaching of the pulp by means of the usual solution of calcium hypochlorite. The operation is carried out in ordinary bleaching engines (beaters holding out 3,500 cu.ft.) at a consistency of 6 to 8 per cent at a temperature of 35 deg. C. This bleaching process is exactly the same in the De Vains process as in others commonly used; in this particular case it may be stated that the requirements in available chlorine range from 2 to 5 per cent of the weight of dry bleached pulp.

At the Spanish plant, shown, a total of 1,326 hp.-hr. of power is required per ton of air-dry pulp production. This may be divided up into three parts: (*a*) Preparation of pulp, including all machinery from cutters of raw material through the drying rolls of paper machine, 563 hp.-hr.; (*b*) chemical plant, including electrolysis,

ELECTROLYTIC CELL ROOM

bleach production, pumping of all chemicals, 629 hp.-hr., and (*c*) general service, repair shop, water pumping and boiler operation, 134 hp.-hr. This shows that when only a small amount of power is available, it is feasible to purchase chlorine and caustic outside.

Economics Involved in the Process

So far straw, esparto and rice fibers have actually been used as raw materials by this process. Successful tests on an industrial scale have also been carried out with bamboo. To judge whether or not the process might be used advantageously in this country, several points have been considered. One of the most important factors is, of course, the possible supply of suitable raw material. With the decreasing pulpwood resources, there is no doubt that other raw materials capable of pulping must be found. The first would naturally be straw, which has long been discussed as a substitute for the pulpwood. This material is available in immense quantities, is entirely suitable for papermaking purposes, is easy to treat and may be converted into a very high-grade product. Close to 800,000,000 tons of straw is produced annually in the United States and Canada, of which approximately 10 per cent might be used for making the highest grade of paper, while the remainder would be suitable for a medium grade and for other purposes. Naturally, the difficulties of baling and shipping this material are great and it could not be expected that anywhere near the entire amount would be gathered. The Canadian Pacific Railway Company has made a special investigation of this project and believes that traveling baling presses in the field could care for an area of 100 square miles or so, working with a crew of nine men 10 months a year. The prices paid for the straw would be more than sufficient to cover the actual expense involved in shipping it from the farm and with paper products selling at the prices now current, there could be little doubt that the baling and selling of straw would be economically feasible for the farmer. In this way he would find a new outlet for a material that he had formerly burned in the field.

It is obviously impossible to predict or even to ascertain with any degree of accuracy what fraction of the total amount of straw produced might be available in pulp making. That the De Vains process offers very promising possibilities, however, even in the face of the difficulties mentioned, is evidenced by its growing use in Europe, as well as by the favorable consideration it has already

received in this country. The large electrochemical industries in this country have developed highly efficient methods for producing these materials and might be able to supply chlorine and caustic at a lower figure than that at which it could be produced locally. This would have to be settled according to the location and availability of power at the proposed mill.

Bagasse as Raw Material

Another raw material not available in the northern part of the country but which is produced in large quantities in the Southern states is bagasse, the refuse of cane-sugar mills. This is largely used at the present time as a fuel, but with very low efficiency. By the De Vains process it has been shown that this material may be profitably transformed into pulp.

It is not possible to give here definite general figures demonstrating the economical advantages of this process. In order to define the exact conditions under which a mill can operate profitably, such factors as those of raw material cost, power sale, shipping facilities, etc., must be carefully considered. There can be little doubt, however, that the simplicity of the process in question possesses sufficient merit to attract more and more technical men interested in the problem of forest conservation as the production of paper and pulp rises. Sooner or later the De Vains process will in all probability be tried out in the United States.

A NEW CONTINUOUS DEWATERING MACHINE FOR THE PULP AND PAPER INDUSTRY

Economy of production in the pulp and paper industry has become an all-important consideration, particularly in view of recent strong foreign competition. Far-sighted owners and managers of mills, throughout the country, have already taken steps to reduce their costs by the employment of the most improved processes, replacement of hand labor with suitable mechanical devices, and the installation of more efficient machinery wherever possible.

The modern method of bleaching the sulphite pulp is a typical example and will serve as a good illustration. Up to a comparatively recent time, the bleaching of this material has been done in tanks or Bellmers with pulp of 5 or 6 per cent concentration. Several years ago it was realized that the consumption of bleach liquor could be materially decreased, the bleach period considerably shortened, and the fibre strength increased if it were possible to carry out the process with greater concentration of the stock.

Perfecting a Method

After considerable experimentation, a method was developed and perfected for accomplishing this result on a commercial scale,—the thick stock bleaching system—which has proven eminently successful, not only in effecting great economies in the bleaching process itself, but in producing a cleaner and better fibre than could be secured with the older system.

Obviously thick stock bleaching, therefore, offers a means of

AUTOMATIC SCREW PRESS

reduction in operating costs and the production of a superior product, both of which are certain to have a pronounced effect upon the pulp and paper industry.

The successful operation of this system is dependent, as previously pointed out, upon a pulp of high concentration, carrying preferably from 20 to 30 per cent solids, and this thickened stock has, until very recently, been obtained by the employment of the well-known wet machine which has several obvious disadvantages and a high cost of up-keep.

To overcome these difficulties, a special form of Continuous Pulp Press has recently been placed upon the market, which has already proven itself eminently suited to the work, automatically dewatering the stock to the desired consistency, requiring no labor for its operation, using a relatively small amount of power for its large capacity, and having an extremely low maintenance cost.

Essentials of Machine

The machine itself, as shown in the accompanying illustration, consists essentially of horizontal, cylindrical, slatted curb or casing, supported on heavy structural steel side frames, and in which rotates a massive pressing screw of constantly increasing hub diameter, so designed that the material is compressed in a thin layer between the two pressure surfaces, each of which is provided with ample drainage area to permit of the rapid escape of the expelled liquors.

The hollow shaft of the press on which the pressing screw is mounted, carries stuffing boxes at each end, which may be connected with a water, steam or compressed air supply for flushing, heating or aerating the material under treatment, through suitable outlets in the screw hub itself.

Heavy reduction gearing at one end of the machine serves to rotate the pressure screw within the slatted curb, while the entire thrust is carried by large thrust collars at the opposite end.

This Press is designed and manufactured by the American Process Company of 68 William street, New York City, who will be glad to supply any further information in regard to construction or operation of this machine to those interested.

A Sizing Problem

A problem which is of considerable interest to one of the members is that of sizing paper satisfactorily with rosin when there is a considerable quantity of calcium carbonate present in the filler. The carbonate could of course be destroyed by means of acid, but that solution of the trouble would not be of any help in this particular case. Has any member of the Technical Association any knowledge of a satisfactory method for rosin sizing in the presence of calcium carbonate? Replies will be handled in blank as usual.

THE SECRETARY.

Calder Board: What Is It?

I am seeking information on a grade of paper known as Calder Board. Can you give me any information as to what materials this grade of paper is made from and where it is used and for what purposes?

A MEMBER.

UNDERFEED MECHANICAL STOKERS IN THE PAPER INDUSTRY

By Edward B. Cowles, Formerly of Pejepscot Paper Co. and Bedford Pulp and Paper Co.

The recent investigations by both the Cost Association and the Technical Association of the Pulp and Paper Industry relative to the cost of steam generation for both power and process purposes have undoubtedly caused many paper mill executives to consider their boiler house as something more than a necessary evil. Information compiled from a number of mills has disclosed that steam costs constitute a large percentage of the cost of manufacture, running all the way from 40 to 60 per cent of the total process cost depending on the grade and weight of paper manufactured. It can readily be seen, therefore, that economical generation of steam is vitally necessary if mills are to be operated on an efficient basis.

No modern paper mill adheres to the ancient practice of hand firing. Stokers or automatic furnaces of some kind are in almost universal use and the purpose of this article is to show the application of the multiple retort underfeed stoker to the conditions existing in the paper industry. In order to secure accurate information, the writer visited a number of paper mills in the United States and Canada and secured data concerning underfeed stokers, chain grate stokers and powdered fuel installations.

Plants were selected which were known to be operating in an efficient and satisfactory manner for the purpose of obtaining figures in some cases covering a long period of time and in other cases showing the most modern boiler house equipment, as there has been considerable improvement in stoker design since the earlier installations. It is impossible in this article to cover the details of every mill visited but representative cases have been selected to serve as illustrations of conditions existing in all.

Table 1

Name of the Company—*Oxford Paper Co.*

Mill—*Rumford, Maine.*

Operating Data.

Name of coal used—New River, W. Va.
B.t.u. per pound of coal—Average 14,400.
Amount of coal used—120,000 t. per year.
Boiler pressure gage—130 lb.
Superheat—°F.
Feed water entering economizer—°F.—204.
Feed water entering boilers—°F.—260-285.
Actual evaporation per pound of coal—10 lb.
Efficiency—74 per cent.
Boiler room labor—6 per shift.
Method of ash handling—Conveyor from ash pit.

Equipment.

Makes of boilers—Sterling.
Type—F. and S.
Number of boilers—18.
Rated boiler horse power—each 5-550,13-500.
Rating at which boilers are operated—125 to 150 per cent.
Year installed—1900 (500) 1916—(500).
Fluctuations in steam pressure—4 per cent.
Stoker used—Taylor—15 Type A-3, Type AA-6.

An Early Installation

The first installation of multiple retort underfeed stokers in the paper industry was made at the mill of the Oxford Paper Company, at Rumford, Maine. Three 6-Retort Taylor stokers were installed in 1907 under 500 hp. Sterling boilers and from time to time additional stokers were added until 1916 when the plant was brought to its present condition of five 550 hp. and thirteen 500 hp. Sterling boilers with one 6-Retort Taylor stoker under each. Table 1 represents usual running conditions at this plant. Regarding the percentage of rating at which these boilers are operated, it must be noted that lack of stack capacity prevents operation at higher ratings for any length of time, though were this condition corrected and the new type "H" Taylor stoker installed, continuous operation could be had at over 200 per cent rating with a possibility of forcing under peak loads to over 300 per cent rating. The actual labor in the boiler room consists of one foreman, one water tender and four firemen per shift and upon the occasion of the writer's visit it was observed that five of these men were sitting on a bench doing nothing. Upkeep cost since the first installation has been so low that no special account for stoker maintenance has been set up. When digesters are blown either one or more at a time, these stokers meet the sudden demand for steam in so satisfactory a manner that variations in steam pressure do not amount to more than 4 per cent and then only for from two to five minutes. To quote W. L. Wescott, chief engineer of this company, "These stokers have always done anything I asked of them and are thoroughly satisfactory in every way."

Another very interesting installation is at the Bathurst Company, Limited, at Bathurst, N. B. Here the equipment consists of five chain grate stokers under five 500 hp. boilers, two type "H" 6-Retort Taylor stokers under two B. & W. 576 hp. boilers and two more type "H"—6-Retort Taylor stokers being installed under two 576 hp. B. & W. boilers. Table 2 shows average running conditions for the two Taylor stokers in operation. The four Taylor stokers replace chain grates which were originally under these boilers. It is interesting to note that it was almost impossible to get sufficient steam to meet the requirements of this plant, with the chain grate stokers operating at maximum capacity but even though two of the B. & W. boilers were down to complete the Taylor installations at the time of the writer's visit, the other boilers were carrying the entire load with ease. The management of this mill feel confident that when these two additional Taylor stokers are operated the load can be carried on the four B. & W. boilers eliminating the chain grate stokers entirely or perhaps using but one. Upkeep on the two Taylor stokers now in operation has been but $13.70 for the three months ending December 31, 1923. Steam pressure variation due to sudden loads often was as high as 40 lbs. before the Taylor stokers were installed but now never exceed 15 lbs. and is quickly met.

Table 2

Name of Company—*Bathurst Co., Ltd.*

Mill—*Bathurst, N. B., Canada.*

Operating Data.

Name of coal used—Spring Hill.
B.t.u. per pound of coal—Average 13,700.
Amount of coal used—48 to 50 tons per day.
Boiler pressure—Gage—150 to 155 lb.
Superheat—°F. 480.
Feed water entering economizer—°F.
Feed water entering boilers—°F. 152.
Actual evaporation per pound of coal—10.5 lb.
Efficiency—76 per cent.
Boiler room labor—3 men per shift (total boiler room labor).
Method of ash handling—Car.

Equipment.

Make of boilers—B. & W.
Type—Water-tube.
Number of boilers—2.
Rated boiler horse power—Each 576.
Rating at which boilers are operated 210 to 225 per cent.
Year installed—1914.
Fluctuations in steam pressure—Never over 15 lb.
Stokers used—Taylor—Type "H."

Canadian Mill Installation

At another Canadian mill both underfeed and chain grate stokers were installed. Here again the underfeed stoker was a Taylor and was used for the purpose of picking up peak loads caused by the

sudden demands for steam by the digesters in the pulp mill. On a number of tests run and from monthly operating reports, the combined efficiency of the Taylor-stokered boiler was 8.8 per cent higher than those boilers served by the chain grate stokers, a very considerable saving when the price of coal is taken into consideration. Fig. 1 gives the comparative flexibility of the underfeed and chain grate stokers. Fluctuations in steam demand in this plant are as high as 40 per cent and the Taylor-stokered boiler is operated at from 175 to 275 per cent of rating.

Figs. 2 and 3 are photographs of the boiler plant at another representative paper mill, before and after the installation of modern underfeed stokers. The boiler equipment here formerly consisted of eight boilers, hand fired, which burned 80 tons of coal a day and developed 1,200 horse power. The plant produced 80 tons of news print and wrapping paper daily. This concern installed Taylor stokers under five of the eight boilers, eliminating the other three. These five boilers now burn 88 tons of coal a day and develop 2,100 horse power, and the plant turns out 120 tons of paper a day. Production has increased 50 per cent with a 35 per cent decrease of boiler equipment, and only a 10 per cent increase in coal consumption. In other words, the output of paper, measured in boiler units, has increased from 10 tons per boiler to 24 tons per boiler.

Powdered Fuel Installation

Regarding the powdered fuel installation visited by the writer it must be said that this system has not yet been worked out satisfactorily. Although boilers were selected and boiler settings were built especially for the use of powdered fuel, boiler ratings of over 150 per cent cannot be maintained without immediate crumbling of the brick work. Even under ordinary running conditions this brick work has to be renewed every 100 days. A very considerable saving in labor has been affected over the previous method of hand firing, 15 men a day to be exact, but no appreciable saving has been observed in coal consumption. Coal dust was very much in evidence in the boiler house and pulp piled around the yard was badly strained with coal. In fact, houses in the village nearly half a mile away showed undeniable evidence that unburned coal was in the atmosphere. Such a condition would of course preclude the possibility of using powdered coal in a mill manufacturing high grade papers where clean stock was essential.

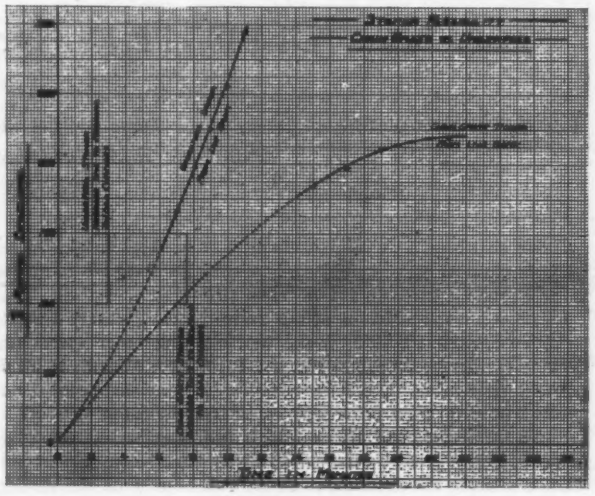


FIG. 1

What Study of Data Shows

Summing up the above data it would seem that in mills using bituminous coal as fuel the most satisfactory and efficient method of burning this coal is on the underfeed type of stoker. The thick fuel bed carried on this type of stoker responds promptly to fluctuations in steam demand and these fluctuations are necessarily violent when a chemical pulp mill is operated in conjunction with the paper mill. One of the best known paper mill engineers on this continent who has had a wide experience with different types of stokers made this definite statement to the writer. "The underfeed stoker is unquestionably the stoker for the paper industry and the sooner manufacturers realize this fact and act accordingly, the sooner they will be able to lower their steam costs."

FIG. 2

FIG. 3

DEFINITION OF PAPER TERMS

Supplementary Report of the Committee on Definitions

PREPARED BY F. A. CURTIS, FORMERLY CHIEF PAPER SECTION, BUREAU OF STANDARDS, AND C. J. WEST, CHAIRMAN, COMMITTEE ON DEFINITIONS, NATIONAL RESEARCH COUNCIL, WASHINGTON, D. C.

(*Continued from last week*)

N

NEWS PRINT—51. A kind of cheap printing paper, made largely from mechanical pulp, soft-sized and machine finished; used for various printing purposes and in cheap tablets.

(NOTE.—Secretary Mellon, of the United States Treasury Department, on August 29, 1923, issued the following order specifically defining standard news print under the Tariff Act: "As the result of an investigation conducted by the Department and conclusions reached, standard news print paper, as covered by paragraph 1672 of the free list of the tariff act of 1922, is hereby defined as consisting of mechanically ground wood pulp and chemical wood pulp or sulphide containing not in excess of 30 per cent of sulphite and varying in weight not more than 10 per cent from 32 pounds to each 500 sheets or 24 inches by 36 inches. This definition is applicable to news print paper without regard to the color thereof.")

NEWS VAT-LINED CHIPBOARD—1002. A combination chipboard with an outer lining of over-issue news.

NINE POINT STRAWBOARD—.009. A coarse cheap board made of wheat and other straws; used by corrugated box manufacturers in making corrugated boxboard; corrugated strawboard is faced with jute liner; also used for single-faced corrugated board and corrugated hemp wrappers.

NITRATING PAPER. A light weight rag or sulphite absorbent paper; used in the nitrating process for making nitro-cellulose compounds; waterleaf paper similar to that used in the manufacture of vegetable parchment; cotton and sulphite pulp also used for nitrating purposes.

NON-CURLING GUMMED PAPER. Specially prepared gummed paper, the body paper being made as nearly free from stretch as possible; the coating of gum when dry is broken into fine particles by drawing the finished paper over a steel bar to prevent the film of gum from acting as a single surface.

NON-PASTED BLANKS—300. A term applied to coated or uncoated blanks which are usually made on a multi-cylinder machine and generally vat-lined, such as patent coated, etc.

NON-TEST CHIP BOARD. Chipboard, made without requirements as to strength.

NOTE. Sizes of paper: 5½ by 8½ inches, Folio note.
6 by 9½ inches, Pocket note.

NOTE PAPER. Flat writing paper, of various qualities and finishes; generally folded.

NOTION ENVELOPES. White manila or colored envelopes; used as a delivery or wrapper for small articles or merchandise; colored sulphite wrapping used to a large extent for this purpose.

NOVEL NEWS—513. A kind of heavy-weight rough finish news print used for printing cheap novels.

N. PAPER. Sortings of writing papers inferior to M. paper; usually contains specks and wrinkles.

NUMBER 1 BRISTOL. A solid sheet of heavy ledger grade of paper, made wholly or principally of rags, on a fourdrinier machine, two or more sheets of which are sometimes pasted together to secure desired thickness.

NUMBER 1 KRAFT—82. A kind of colored wrapping paper, made wholly of sulphate pulp; usually tests about one point per pound.

NUMBER 1 MANILA—812. A kind of wrapping paper, made wholly principally of sulphite pulp, but containing other fibers, such as sulphite pulp or kraft clippings.

NUMBER 1 MILL BRISTOLS. A cardboard somewhat similar to heavy ledger, but pasted, usually; is generally not quite so high a quality as No. 1 bristol, which see.

NUMBER 2 BRISTOL. A bristol or cardboard made of lower grades of pulp, but retaining the characteristics of the No. 1 bristol type; made sometimes on a multi-cylinder machine.

NUMBER 2 KRAFT—83. A kind of brown wrapping paper made principally of sulphate pulp, but containing other fibers, such as sulphite pulp or kraft clippings.

NUMBER 2 MANILA—813. A kind of wrapping paper in which mechanical pulp is the predominating material used in its manufacture; manila color or resembling color of mechanical pulp.

O

OAK-GRAINED BOARD. A jute or pulpboard, with one liner printed with an oak-grain design.

OATMEAL WALL PAPER. A hanging (news stock) paper, having spread upon its surface a coating of wood flour, for decorative purposes.

OCTAVO (8 vo.) An old term used in referring to the size of a sheet.

OFFSET PAPER—615. A kind of printing paper, specially sized for offset lithography; finish, non-curling and absorptive qualities of importance; should be free from lint and fuzz and is generally slightly antique finish.

OFFSET POSTCARD. A bristol or cardboard, made of sulphite and soda pulp, with a kind of vellum finish; used for post cards, or special jobs where it is desired that work will stand out and still show soft finish.

OILED BOARD. A tag board or heavy weight water-finished fiber board which has been oiled; used for art stencil, dividers in copy books, shipping stencils, etc.

OILED PAPER. A general term applied to wrapping paper that has been immersed in an oil bath, or treated with oil; neutral mineral oil is generally used.

OILED STENCIL. A heavy solid tag board, treated with oil to give it resistance against moisture when used as a permanent stencil.

OILPROOF PAPER. A specially treated paper, that will resist oil when applied to its surface; such as vegetable parchment. *See* Greaseproof paper.

ONESIDE COATED PRINTING PAPER—6000—6020. A kind of writing paper, either single or double coated on one side of the sheet.

ONE-PIECE BOX. A paperpulp box (carton) consisting of a body with four closing flaps at each end, in which the flaps are a part of the body (not stitched or otherwise fastened on).

ONIONSKIN—912. A kind of light weight writing paper, which is thin, transparent and highly glazed. It is made transparent by excessive hydration of stock in the beater, assisted by high finish; durable; used for permanent records where a minimum bulk is desirable. It has also become popular for manifolding purposes; with modified finish, or glazed, peculiarly adapted to typewriting manifolding.

OVERPECK BLANKS. See Non-pasted blank.

OYSTER CONTAINERS. *See* Sanitary containers.

P

PACKING PAPER. (a) A general term applied to any paper used for packing purposes.

(b) A felt or oil-treated board, used for packing between cast-iron joints.

PAILS, PAPER. Containers in the form of pails or buckets, made of hard fiber, pulpboard or woodpulp; either cut into parts and

assembled or molded into shape and compressed; used for packing dry commodities, such as candy, nuts, etc.

PAMPHLET COVER. Cover papers of various thicknesses, colors, designs and finishes; used to cover pamphlets, booklets, catalogs and the like; usually being stitched but not bound; originally used as a protection, like manuscript cover; made of varying quantities of rags, soda and sulphite pulp.

PAMPHLET PAPER. An uncoated or coated printing paper; used for small books without stiff back; used for printing short tracts or articles.

PAPEL BOARD. Any heavy board, possessing rigidity and used for panels or backing; hard fiber, cloth board, etc., are examples.

PAPER. A matted or felted structure of fibrous material, formed from a water suspension in a relatively thin sheet; composed essentially of cellulose fibers obtained from vegetable growths in a more or less pure state; wool and asbestos used only in certain kinds of paper.

PAPER BOX. A container, with detachable cover, made of patent coated, good bending quality board or manila lined chipboard; may also be made of jute liner or of solid fiber container board.

PAPEROID. A trade name given to a heavy rope wrapping which is used for large expansion envelopes, for filing legal documents.

PAPER NAPKINS. Tissue paper, cut to sizes suitable for use as napkins; plain or creped and sometimes decorated with fancy printed designs; generally made of bleached sulphite pulp.

PAPER STOCK BOARD. Commonly known as chipboard and made from a grade of waste paper known as "mixed papers", made on multi-cylinder machine, in several qualities; used for a large number of purposes.

PAPER TEXTILES. A general term descriptive of various fibers made of light-weight paper which has been twisted into yarn and then woven.

PAPER TWINE. Narrow strips of sulphite and sulphate tissue or wrapping paper, twisted into form like twine; paper is moistened just before twisting to preserve the twist; used for tying small packages; made in different sizes.

PAPER YARN. Light weight paper twine; generally made of tissue paper; used for weaving into fabrics.

PAPETERIE PAPER. A kind of writing paper, designed for the box stationery trade; somewhat of the wedding type but less refined; must fold reasonably well for envelopes; made in white and an infinite variety of light tints; usually linen or kid finish; but many special finishes are used.

PAPER-MACHE. Wood pulp suitable for molding or die-cutting into a variety of articles of merchandise; also used for cupolas, cornices, and similar purposes, where light weight is essential.

PARAFFIN PAPER. A sized or unsized paper, passed through a bath of melted paraffin or wax; light weight paper generally used; used for sanitary wrappers and covers.

PARCEL TAPES, PAPER. Strong jute, sulphite and sulphate wrapping paper, cut to narrow strips, of different widths, and gummed on one side; used to fasten the ends of wrappers and for sealing packages.

PARCHMENT CIRCLES. Parchment paper, cut to circles for use principally as caps or tops for pails, buckets, and jars which hold articles containing moisture.

PARCHMENT DEED—905. A kind of very high-grade, heavy-weight writing paper of the bond type, in imitation of genuine sheepskin parchment.

PARCHMENT FINISH. A term applied to a finish of paper resembling genuine parchment; this finish is usually produced on a plating machine similar to that used to obtain a linen finish, only instead of cloth, a regular thickness of rippled effect paper is used.

PARCHMENTIZING. The process of treating unsized waterleaf rag or sulphite paper in a bath of sulphuric acid and the subsequent washing and drying of the paper to produce vegetable parchment.

PARCHMENTIZING PAPER. A waterleaf sheet, used in the production of vegetable parchment, which see.

PARCHMENT-LINED BOARD. Chip and other boards, lined with vegetable parchment, imitation parchment or greaseproof paper to make them grease and oilproof.

PARCHMENT PAPER. (a) A term used to designate a kind of paper resembling the skin of a goat, sheep and other animals; made by treating a waterleaf rag or sulphite sheet with sulphuric acid.

(b) A very high-grade, heavy-weight bond paper, in imitation of genuine sheepskin parchment, to be used as a substitute therefor. *See* Parchment Deed.

PARCHMOID (PARCHMYN). Trade names applied to imitation parchment, which see.

PASSE-PARTOUT. A strong wrapping paper, gummed on one side and cut into narrow strips and sold in rolls about 2 inches in diameter and 1 inch wide; made in all colors, as well as in the metallic bronzes; black is quite frequently used for the binding of lantern slides though the other colors are frequently used in the mounting of pictures.

PASTEBOARD. A general term applied to both boards and cardboards that are formed by pasting a liner on cheap stock; popularly used to denote any stiff board or cardboard of medium thickness.

PASTED. A term applied to covers, bristols or boards in which two or more thicknesses of dry paper have been pasted together as an operation separate from their manufacture on the paper machine; the different sheets pasted together may or may not be of the same stock; flour paste, starch or sodium silicate (waterglass) may be used as an adhesive.

PASTED BLANK—301. A term applied to a kind of blanks coated or uncoated, made up of a center stock, usually manufactured on a multi-cylinder machine, to which a sheet of book paper is pasted on each side.

PASTED BOARD—11. A group of boards, prepared by pasting together two or more boards or by sheet lining a board.

PASTED BRISTOL—310—320—330—331. A term applied to bristols in which two or more thicknesses of dry paper, which may or may not be of the same stock, are pasted together as an operation separate from their manufacture on the paper machine. This is generally done by machine but in the case of some wedding bristols hand pasting is used.

PASTED CHIPBOARD—120. A kind of board consisting of two or more layers of chipboard, pasted together to produce a desired thickness.

PASTED COVER PAPER—41. A term applied to a group of cover papers, prepared by pasting together two or more sheets of cover paper; often called double thick.

PASTED FELT. Two or more sheets or plies of felt, pasted together.

PASTED STOCK. *See* Pasted.

PASTED WEDDING BRISTOL. *See* Wedding bristol.

PASTINGS. A term applied to cuttings or shippings of paper from the pasting machine.

PATCH STOCK. A stiff board, made of jute and a little sulphite; used for eyelets in large open-end envelopes and tags.

PATENT-COATED BOARD. A term indicating a type of cheap board with a white vat-liner on one side.

PATENT-COATED BOXBOARD. *See* Patent-coated board.

PATENT-COATED MANILA BOARD—1011. A manila combination board with a white vat-liner on one or both sides and possessing a high finish.

PATENT-COATED NEWSBACK. See Patent-coated newsboard.

PATENT-COATED NEWSBOARD—1021. A combination newsboard, with a vat-liner of white shavings.

PATENT-COATED NEWSCENTER MANILA BACK. A board, with a vat-liner of white shavings on one side, a manila back made from manila clippings and a newsboard base.

PATENT-COATED SOLID MANILA. A board, with a manila base, made from manila clippings and mechanical pulp and with a vat-liner on one side made from white shavings.

PATENT-COATED WHITELINED BOARD. *See* Patent-coated newsboard.

PATTERN BOARD. A light weight board, made of sulphate pulp and rag stock; used for tailors' patterns.

PATTERN PAPER. A paper used by tailors for making patterns, containing sulphite or sulphate in whole or part, depending upon the strength required; usually black or green in color. *See* Designers pattern paper.

PATTERN TISSUE—713. A kind of strong tissue, made of sulphite and rag pulp; usually manila color; used for cutting into forms as patterns of dresses and other clothing.

PEN CARBON PAPER. A carbon coated tissue paper, suitable for duplicating writing by means of a pen.

PENCIL PAPER. *See* Lead pencil paper.

PERGAMYN. *See* Imitation parchment.

PHONOGRAPH RECORD ENVELOPES. A heavy wrapping paper, made of kraft, rope jute or sulphite; made into an open-end envelope, suitable for holding phonograph records.

PHOTO-COPYING PAPER. A paper, so sensitized that copies may be made of records, etc., by a photographic process.

PHOTO FOLDERS. Cover paper, of various thicknesses, designs and colors; used as a mount for photographs and large enough to fold over and protect the picture; usually a double-thick cover.

PHOTOGRAPHIC PAPER. Paper of light to medium substance, for sensitizing for photo printing; fiber practically pure cellulose; free from metallic or other foreign substances; chemically pure; all chemicals used in reduction of fibers absolutely removed, none remaining in sheet except such as are introduced to assist in the sensitizing process; closing superlatively fine; fibers strong when wet.

PHOTOGRAVURE PAPER. An English-finish book paper, suitable for use in printing by the photogravure process.

PHOTO-MOUNTS. A term used to indicate any heavy paper of board, used to mount photographs; made of newsboard, or pulpboard and lined with a special embossed cover paper; used also for advertising.

PHOTO-MOUNT COVER. *See* Photo folders.

PHOTOSTAT PAPER. A sensitized paper, suitable for duplicating records by a photographic method; a trade name.

PICTURE BACKING BOARD. A double-faced, corrugated strawboard or plain chipboard; used as backing in framing pictures.

PIE BAG. A flat bottom bag, suitable in size for enclosing pies, usually light weight wrapping and of manila color.

PIGEONHOLE BOX, PAPER. A small box, suitable for filing in pigeonholes of roll-top desks; made of straw or chipboard and covered with glazed paper or cloth.

PIN PAPER. An anti-rust and anti-tarnish paper, either of book stock or a sulphite manila; usually of a blue shade; used for merchandising pins in packages.

PIN TICKETS. Small pieces of cardboard or tough heavy wrapping paper; having attached thereto a pin or hook, adaptable for fastening to packages or pieces of merchandise; generally used as price indicators.

PLAIN BLANKS. Uncoated, pasted cardboard, white lined on both sides, distinctive for whiteness, stiffness and light edges; suitable for window cards, posters, etc.

PLAIN BLOTTING—0004. A term applying to a commercial blotting in original sheets or in cut sizes, before coating, printing or decorating.

PLAIN CHIPBOARD—1200. A term applied to ordinary solid chipboard.

PLAIN COATED COVER PAPER. A heavy enameled paper, in cover weights, possessing strength for folding and without printing, embossing or other decorating.

PLAIN SHELL BOARD. A light weight solid chipboard.

PLAIN STRAWBOARD. Strawboard without a liner; a certain thickness, called 9 point (0.009), is used for the manufacture of corrugated container board.

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PLANT DRIER. A heavy gray absorbent paper, used by plant collectors, in their field work to press and carry specimens.

PLASTERBOARD. A board made of heavy wrapping paper or felt, with or without gypsum, designed to be fastened to studs or joists and to be used as a backing for the application of plaster.

PLATED VELLUM FINISH. A smooth finish, to imitate the appearance of vellum; produced by pressure in a plater.

PLATED FINISH. A term applied to a high, smooth finish, obtained by the plating process; used chiefly in connection with high grade bristols, bonds and cover paper, and the higher grades of coated lithograph blanks.

PLATE GLAZED. A term applied to a high finish obtained by placing sheets of zinc, copper, or smooth hard boards between the sheets of paper to be finished and passing between the rolls of a plater.

PLATE PAPER. A highly-finished, light-weight book paper, coated one side; suitable for plate printing in colors.

PLATER BOARD. A thick, stiff, smooth board; used in plate-finishing paper. *See* Press Board.

PLATER FINISH. A high smooth finish produced by pressing against a smooth plate.

PLATES, PAPER. *See* Dishes.

PLATE-WIPING PAPER. A light weight tag board; used for wiping engravers' plates between impressions; sometimes oiled. *See* Tympan paper.

PLATINUM PAPER. A sensitized photographic paper; used for prints from negatives to give a brown, dull effect.

PLAYER-PIANO PAPER. A tough, partly parchmentized paper; used for punching for player-piano records.

PLAYING-CARD STOCK. A stiff pasted cardboard, made of sulphite and soda pulp, with a coated and glazed surface; used for playing cards for various kinds of games; usually with a waterproofed surface.

(To be continued)

Engine, Turbine or Motors for Paper Machine

As an active member of your association I write you regarding a matter which is at present of some importance to us and regarding which satisfactory information appears to be somewhat difficult to obtain.

We are at present contemplating installing another fast paper machine for the manufacture of news print and we are interested in obtaining reliable information as to recent modern prime movers for the papermachine drive.

We are interested in either a twin variable speed engine for direct connection with rope drive (English system) or any other type of steam engine vertical or horizontal which can be direct connected and will occupy a minimum amount of floor space.

We have at present, among other paper machine drives, a 425 hp. steam turbine of well-known design, direct connected to a 500 hp. herringbone type reduction gear for the drive of a 158 in. news machine, operating at 675 ft. per min.

This arrangement has the advantage of simplicity and minimum floor space but apart from high steam consumption the reduction gear is almost a continuous source of trouble.

We have therefore decided on a suitable modern type steam engine for our new machine, such as is manufactured by the Goldie-McCulloch Company in Canada and installed on recent paper machines by Belgo-Canadian Paper Company, Shawinigan Falls, the Abitibi Power and Paper Company, Iroquois Falls, and several other plants.

The writer would greatly appreciate information in regard to recent modern prime movers, both steam engines and steam turbines, giving the relative merits as to first cost and economy in each case; also the name of the manufacturer and some of the mills in which these are installed.

NOTE:—Replies from members will be handled in blank as usual. —EDITOR.

IT IS GOOD BUSINESS TO PROTECT AND SAFEGUARD THE LIFE AND HEALTH OF YOUR EMPLOYEES

By H. F. Obermanns, Hammermill Paper Company, Erie, Pa.

A great deal has been said and done under the mantle of safety work in recent years and yet, in the final analysis, the principal reason for getting these things done is that it is good business. It it good business to protect and safeguard the life and health of your employees, because an injured or crippled employee cannot do as efficient work as one who possesses all his limbs. A man whose attention is continuously called to the unsafe conditions and surroundings of the machinery with which he has to work, cannot do perfect work and the employee who has to take the place of an injured man has to be educated, for which large sums have to be paid until he has reached the efficiency of his predecessor. There is, of course, the human element which must not be overlooked.

I just made the statement that safety work must pay and yet there are many paper plants as well as thousands of employees in the country, who do not believe in it and who simply do a minimum amount of safety work just because the law requires it or because they find that by doing so they are able to get a somewhat cheaper insurance rate.

In our own plant we have recognized the value and importance of proper safety work and, while it has to be admitted that great improvements can still be made, we feel that in paper mills at least, and the writer has seen a great many of them in this country, ours can be considered a very well guarded plant. However, guarding pieces of mechanism is perhaps the smallest feature entering into real safety work. A guard will not offer in a great many instances, 100 per cent protection, it will not prevent accidents unless the man himself is imbued with the proper safety spirit and here again what can you expect of the man if he finds that his immediate superior looks upon safety work only as a necessary evil. The real value of safety work can only be obtained if together with proper and efficient guards, everyone in the organization, from the lowest to the highest, earnestly strive to eliminate accidents which are wasteful in time, money and materials to the Company as well as to the employee.

Important Safety Factors

It is not the object of this article to go into detail as to the type of guards recommended and I shall only take a hasty trip through the plant, dwelling on the most important factors from the safety standpoint, in each department.

WOOD YARD—Enormous quantities of wood have to be handled in the course of a year, sometimes under very unfavorable conditions. In the spring the sap of the wood has not completely dried, making the logs slippery and hard to stand on or to handle. Summer rains very often increase this difficulty and in winter the logs, frozen or encrusted with ice from which the pick used in handling the wood very often slips, do not materially aid to make this job any safer. Very little can be done in this particular department in the line of safety guards and the best protection and insurance against accidents is a safe employee.

WOOD ROOM—A great deal of what has been said about the Wood Yard is also true of this department, although numerous mechanical appliances are in use in the Wood Room which, unless properly guarded, are decidedly dangerous. One of the worst sources of accidents in a Wood Room are the old type disc barkers, which fortunately, owing to their wasteful operation, are gradually disappearing. Wherever they are used, however, they should always be used in connection with a mechanical attachment which holds and rotates the stick of wood against the barking disc. In mills making fine grades of paper it is necessary to trim and clean the logs by means of hand hatchets and here again extreme caution on the part of the operator is the only safeguard that can be offered for his protection.

Acid Plant Dangers

ACID PLANT AND DIGESTERS of the Sulphite Mill offer numerous sources for possible injuries. The gases developed in such a plant if given in concentrated doses, are very suffocating and gas masks of the best type should be available at such location where they are readily available. Chip Bins and Blow Pits of the Digesters must be safeguarded in such a way that operators finding it necessary to conduct work in either will be promptly notified before a Digester is either filled or blown. In another part of the Sulphite Mill bleaching powder or liquid chlorine is used in fairly large quantities. This gas is much more poisonous than the sulphur-dioxide gases used in the acid plant and proper precautions have to be taken particularly where liquid gas is used. The best recommendation in this connection is to have gas masks available also water hoses wherever the possibility exists for a leak to develop.

PAPER MILL—The Paper Mill as a rule offers few hazards largely because paper makers as a rule are skilled operators who, during their many years of preparation for their trade, have become fully aware of the dangers connected with their occupation. A modern paper machine, however properly equipped with guards wherever possible, offers few hazards. The paper machine calender perhaps is still nipping off finger tips and no man except the operators entrusted with this particular job should be permitted to handle paper at this point. Perhaps the most dangerous part on the paper machine is the reel; particularly in mills where the old type upright reel is still in use. This is positively dangerous and inasmuch as the point between reels cannot be guarded it should be eliminated. The various types of drum winders, particularly those revolving in such a direction as to offer a "nip" on the operator's side, also have to be operated with the utmost care.

I purposely do not mention safeguarding clutches, pulleys, shafts, set screws, et cetera, as these things should be taken care of in any factory whether paper mill or otherwise.

Benefit of Safety Committees

In closing I want to say a word regarding a factory organization such as a Safety Committee which can be of wonderful benefit. Such an organization should consist not only of the superintendents and executives of the plant (it is important that these should faithfully attend) but it should include men selected from the ranks of the operators as well. This mill committee should be changed at frequent intervals so as to give everyone a chance to serve on the Committee and in order to keep interest alive among the operators.

A safety committee consisting of the executives of the plant can easily decide where guards should be put and how they ought to be made but that part of the Safety Committee consisting of the operators will see to it that the guards will stay where they are put. A Safety meeting in an industry should be considered as a meeting of first importance and you will soon learn that, where safety work is considered as work of serious importance, the men in the plant for whose benefit this work is largely conducted, will follow in complete harmony with this program.

Another New Pulp Company

Among the many companies incorporated with provincial charter during the past week, was the Magdalen Pulp and Lumber Company, Ltd., with head offices in Montreal, and capitalized at $2,000,000. The new pulp and lumber company is granted the usual powers to carry on business of manufacturers and to exploit timber limits. It is understood that the business will be carried out at Cap de la Madeleine.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

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THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

THE EXPENSE OF POWER AND BUILDING SERVICE*

By James P. Kendall, Western Electric Company, New York City

The rate study (see following page) constitutes a plan for showing the expense of power and building service divided by systems and classifications of expense; is intended to show not only the expense of operating those systems, but the efficiency or lack of efficiency in their operation.

First, I want to point out that the steam system is charged with the expense of generating steam, depreciation in that part of the building directly considered as part of the steam system, namely, the smoke stacks. The smoke stacks are considered part of the steam system rather than part of the building because, if steam were purchased from a supplier, the stacks would no longer be required for the proper operation of the building. Supervision, rent, in short, all expense to produce steam, then is charged an additional item "Steam," which in this study is $3,810, for the three months' period. This is the amount of steam required to operate the conveyors, pumps, etc., within the steam system, and is shown so that an intelligent comparison may be made if another method were considered, electric, for instance, to operate these pumps, etc. A careful study will reveal the fact that this charge does not effect the rate, but does show the distribution of the total amount of steam generated.

Second, the item of power purchased, charged to the Electric Current system, is electricity purchased from a supplier.

Third, the gross expense of gas is shown to be approximately 100 per cent more than the net cost of the gas purchased. It is considered that this gas is supplied to departments with low pressure air for Bunsen burners. Labor and power are charged to this system for the care of blowers, which is considered part of the expense of operating the gas system.

The Power Engineer is charged with the total salaries of the employees of the power system and credited with the salaries when they are charged into the various systems, as explained under "Salaries." The expense of the Chief Engineer, who does not devote his time to any one system and is equally responsible for all power systems, is considered as loading or overhead and distributed over all systems.

A surplus is shown in all systems. When we consider the fact that this study is made to represent the time of the year when the greatest amount of power supplies are used, it will be understood why the writer does not recommend the adjusting of the standard rates at this time.

*From Bulletin published by National Association of Cost Accountants.

Rent United Charged Out for First Quarter

	10-11-12 Floors	Other Office	Warehouse	Orders and Cases	Total
Other	$25,346	$90,863	$15,520	$5,496	$137,225
499	.....	982	807	48,984	50,773
Total....	$25,346	$91,845	$16,327	$54,480	$187,998
	46,939 sq. ft.	255,126 sq. ft.	108,860 sq. ft.	.....	.....

Standard Rate—$2.16, $1.44, $0.60.

In connection with the study of the expense of the various power units, the following brief explanations of the headings as they appear on the quarterly rate study are as follows:

Salaries

Power—The figure for power salaries is obtained from the time charged on weekly time tickets that are checked with the clock tape and rated by the Payroll Department. The time ticket shows an A order number which signifies an accounting classification. After the tickets are rated by the Payroll Department and checked with the salary paid, they are sent to the Cost Department, assorted by order or system number, summarized by job and entered against the job. The handling of salaries in this manner enables us to shift employees from one power system to another.

Building Service Department salaries are computed solely from the clock tape.

Supplies

Fuel—Fuel is purchased through contract agreements. It is delivered on demand and billed direct. And bills incident to fuel supply are approved by the Engineering Department, then passed on to the Accounting Department for summary. The expense item for fuel is determined by charging at a current average rate per ton that takes into consideration all fuel expenses, including expenses involved in the transportation of the fuel. Fuel is charged to the steam system monthly at the current rate on the basis of reports of current fuel consumption made by the Power Engineer.

Power, Water and Gas Purchases—The expenses of power, water and gas purchases are determined by meter readings and billed by the suppliers. The bills for these items go direct to the Accounting Department, which obtains the approval of the Plant Engineer before making the charges on the books.

Material Drawn from Stores—This is material drawn from standard stock. The draw-out ticket shows the department number to which the expense is to be charged. The charge is made on the basis of the last cost of the unit item.

SUPPLIES AND OUTSIDE SHOP WORK (material or labor purchased from outside supplier)—Ths expense is authorized on non-stock requisitions that are billed to the system concerned by the Accounting Department. The expense is classified by the Accounting Department through the medium of a system number that is entered on the requisition.

Depreciation

BUILDINGS—The original cost of the building is liquidated by depreciating at a rate per year established by the comptroller and with the exception of the smoke stacks, that are charged direct to the steam system, this item is all charged to rent or building service system, the expense of which is charged out under services rendered. The value of the building is adjusted on the books kept by the Accounting Department, as expenses are incurred on X orders resulting from cases originated for making changes that affect the value of the permanent structure, such as masonry partitions. The other details included under building may be obtained by referring to Accounting Department's Account No. 2.

PERMANENT FIXTURES—The cost of permanent fixtures is absorbed or depreciated at the rate established, as soon as the case used for the work is closed. The items coming in this class are fixtures that become a part of the building that would not be moved in case the building were placed in other hands. Examples are a boiler, new elevator and new water tank.

MACHINERY—The cost of machinery is depreciated at 7½ per cent per year. In carrying the account from year to year, an inventory is made on all machinery each year, and monthly a summary is made by adding the costs of additions to this classification which is used in determining the current rate of depreciation. The assignment of machinery numbers and the records of purchase and service are handled by the Accounting Department.

ACCOUNT 2—BUILDINGS—Buildings include the cost of construction, excavations, filling, subways, cement and cinder driveways, landscape gardening, sewers and walks inside of grounds as distinguished from public improvements of the same nature outside of grounds, which are charged to Grounds, Account 1.

New additions include excavations, foundations, masonry partitions (including woodwork, trim doors and painting), structural work, etc.

All items charged or credited to Account 2 are subclassified according to the floor and section upon which they are used.

The method of determining the subclassification is as follows: The numerical symbol to be used consists of four digits, the first two representing the floor and the last two, the Section, A—1, B—2, etc.; for example:

FLOOR	SECTION	NUMERICAL SYMBOL
7th	A	0701
11th	D	1104
1st	H	0108

A typical classification is as follows: 2-1101: 2 stands for the account number and 1101 for the floor and section reference number, indicating that the item so classified applies to Account 2, eleventh floor, section A.

FURNITURE AND FIXTURES—25 per cent of the gross additions under the classification of Furniture and Fixtures are charged to expense yearly, until completely depreciated, and, as in the case of machinery, records are kept of the details of the purchase and service of this classification by the Accounting Department.

SMALL TOOLS—Small tools are also depreciated 25 per cent within the year of the billing.

Machinery, furniture, fixtures and small tools are obtained on an authorization's estimate that is approved quarterly for all departments, and before any item of these classes can be purchased on order the order is sent to the Accounting Department to determine if there are funds available on the blanket authorization.

Systems Rate Study—First Quarter

	Steam 561	Elec. Current 562	Compressed Air 563	Exhaust Air 564	Gas 565	Water 566	Power Room 567	Total Power Systems	Building Service 499
Salaries	$5,992.00	4,619.00	389.00	982.00	455.00	437.00	.....	$12,874.00	$40,191.70
Supplies—									
Fuel Used	15,594.74	.....	.....	.....	.....	.....	.....	15,594.74	.....
Power purchased	.....	6,044.63	.....	.....	.....	.....	.....	6,044.63	.....
Water purchased	.....	.....	.....	.....	.....	1,249.00	.....	1,249.00	.....
Gas	.....	.....	.....	.....	1,024.83	.....	.....	1,024.83	.....
Materials drawn from stores	45.34	340.84	22.49	277.50	7.52	22.55	10.73	726.97	1,684.21
Supplies and outside shop work	372.80	403.60	—2.66	11.81	.....	.....	105.34	890.89	1,465.72
Depreciation—									
Buidlings	237.00	.....	.....	.....	.....	.....	.....	237.00	11,049.00
Permanent fixtures, machinery	.....	6.00	.....	288.00	.....	3.00	933.00	1,230.00	56.00
Furniture and fixtures	.....	.....	.....	.....	.....	.....	.....	.....	182.13
Small tools	11.47	.....	.....	13.86	.....	.....	.....	25.33	.....
Changes and Repairs—									
Outside repairs	57.05	208.44	.....	.....	.....	.....	5.37	270.88	290.22
C orders	4,065.20	1,952.62	47.73	447.31	87.73	22.01	692.78	7,315.38	20,691.18
Supervision and Clerical—									
A orders (Load. on Sal.)	898.95	692.40	58.46	146.89	68.46	65.98	.....	1,931.14	.....
Engineering Offices	1,828.00	1,409.00	119.00	300.00	139.00	133.00	.....	3,928.00	3,275.00
Surplus Load. on Sal. (Deduct)	—281.00	—217.00	—18.00	—46.00	—22.00	—21.00	.....	—605.00	.....
Miscellaneous—									
Restaurant and deficit	.....	.....	.....	.....	.....	.....	.....	.....	4,004.00
Insurance and taxes	56.49	533.15	.....	3.83	.....	.04	12.12	605.63	13,823.77
Traveling and entertainment	.59	.....	.....	.....	.....	.....	.....	.59	2.48
Post. and transportation	260..95	12.74	.....	2.04	.....	.....	1.22	276.95	65.87
Unclassified	.....	.....	.....	.....	.....	.....	.....	.....	44.00
Services received	.....	.....	.....	.....	.....	.....	.....	.....	541.72
Special services	.....	.....	.....	.....	.....	.....	.....	.....	17.00
A orders	.....	.....	.....	.....	.....	.....	5,147.11	5,147.11	50,966.55
Coal analysis	113.88	.....	.....	.....	.....	.....	.....	113.88	.....
Outside inspection	.....	252.00	.....	.....	.....	.....	.....	252.00	.....
Services Rendered Within the Systems—									
Rent and house service	981.00	951.00	57.00	144.00	51.00	147.00	855.00	3,186.00	1,789.00
Telephone	45.00	.....	.....	.....	.....	.....	.....	45.00	4.59
Electric current and power room 567	716.00	117.00	366.00	104.00	805.00	.....	4,101.00	7,209.00	23,368.00
Water and gas	1,172.00	2.00	.....	219.00	.....	.....	8.00	1,401.00	899.000
Porter Services (B orders)	.....	.....	.....	.....	.....	.....	.....	.....	157.70
Compressed air	29.00	15.00	.....	15.00	.....	.....	59.00	118.00	74.00
Steam	3,810.00	25,373.00	.....	.....	.....	.....	.....	29,183.00	12,706.00
Gross expense	$35,006.46	$42,715.42	$1,039.02	$3,909.24	$2,616.54	$2,058.58	$11,930.67	$100,275.93	187,348.84
Services rendered	42,606.00	44,966.00	1,480.00	6,208.50	3,116.00	2,811.00	11,931.00	113,118.50	187,998.19
Surplus	6,599.54	2,250.58	440.98	2,299.26	499.46	752.42	.33	12,842.57	649.35
Units	38,733,069	691.781	1,972,107	8,278.00	890.590	1,249.468	.....	.....	.....
Actual rate	.93	.06174	.527	.472	2.937	1,648	.....	.....	.....
Standard rate	1.10	.065	.75	.75	3.50	2.25	.....	.....	.....

NOTE—Figures with "Minus" (—) in front are deducted from totals.

Changes and Repairs

OUTSIDE REPAIRS—Outside repairs are authorized on a nonstock requisition authorization and charged to the department or system for which the work is done through the medium of the department number shown on the requisition.

ORDERS—All Plant Department work is done on an order system as follows: A orders cover work done and material purchased by the Plant Department or drawn from stock for the Plant Department applying to systems. The number given in connection with the letter A is the system number. B orders are for porter work and the number following the letter is the department number for which the work is done. C orders are issued for repairs and changes to furniture, machinery or fixtures for any department. X orders are for specific jobs; that is to say, a separate order number is assigned when an X order is issued.

A typical classification is A-561. A represents the order for work or material and 561 the system to be charged with expense.

Supervision and Clerical

A ORDERS (LOADING ON SALARIES)—The loading on salaries for A orders is the sum obtained by taking a per cent on all A orders. The per cent figure is obtained from past experience as being sufficient to balance out all the year the expense incurred by the Power Engineer's Department, including the salary of the Power Engineer and that of his secretary.

SURPLUS LOADING ON A ORDERS (POWER ENGINEER'S DEPARTMENT)—The figure for the surplus loading on A orders is the difference between the actual expense that is incurred by the Power Engineer's Department and that obtained by using the per cent or standard rate applied on A orders as stated under the previous item. The amount is a debit or a credit, depending upon the actual expense of the Power Engineer's Department being greater or less than that obtained by applying the standard percentage rate.

ENGINEERING OFFICE DEPARTMENT—The expense of operating the Engineering Office Department is divided on a percentage basis that is set from past experience and from best judgment. The departments bearing this expense are the Building, Shop Restaurant, Rent and Power Systems. The per cent charged to power systems is prorated over the various sub-systems on the basis of the unloaded salaries in those systems or the salaries on A orders.

Miscellaneous

RESTAURANT DEFICIT—The item Restaurant Deficit is the difference between the receipts and the gross expenses of operating the restaurant, including the items donated by the company, such as rent for space occupied, changes, repairs, depreciation on equipment, insurance and supervision. The amount is charged to the Building Service Department, since the restaurant is listed under this heading.

INSURANCE AND TAXES—The property is insured under two headings on the basis of the cost of the building and the insurable value of the contents. The figure for insurance entered opposite the item of Insurance and Taxes for various systems is the expense of the insurance of the property of the particular system involved. The main item of tax and insurance, that is, on the building as a whole, is charged to rent system.

TRAVELING AND ENTERTAINING—The traveling and entertaining expenses incurred are shown on vouchers that bear the department number for classification.

POSTAGE AND TRANSPORTATION—The item Postage and Transportation is self-explanatory, with the exception of one seemingly unusual charge, which is the item charged to the system for the cartage of ashes.

SERVICES RECEIVED—The expense of Services Received is the amount billed for outside labor.

A ORDERS—A Orders are explained Orders.

ANALYSIS OF COAL—The expense, Analysis of Coal, is one incurred for the steam system by the Chemical Laboratory.

COST SECTION

Services Rendered Within Systems

Services rendered within the systems consist of the units of electric power, steam, compressed air, exhaust air, gas, water and floor space charged at a rate per unit that is estimated from past experience to be sufficient to balance out the expense incurred in connection with the items, as follows:—Meter readings are obtained and entered in meter books by the Plant Department and tables are prepared for use in the Accounting Department showing per cents and estimated amounts chargeable to various power systems and other Engineering Departments. Gas, water and electric current meters are provided for each system for various departments insofar as practicable, as determined by the amount of item used. Where it is not possible to give separate meter readings, an estimate showing the percentage subdivision is given by the Plant Department. Master meters are provided and a small proportion of these, services, that is, not separately metered, is subdivided among various systems in accordance with the best judgment of the Building Engineer.

Steam is subdivided by the rate consumed by various machinery units, as determined by tests.

RENT AND HOUSE SERVICE—The rent unit is a square foot of floor space and the record incident to this item is entirely done by the Accounting Department. The floor space is divided into three classes due to the nature of the space, and the three classes are charged at different rates to the various departments, depending on the kind and number of square feet that they occupy. The rate at which the space is charged is determined by the amount that it has been found from experience will balance out the expense charged to the building service system.

Columbia River Paper Mills Install Machinery

[FROM OUR REGULAR CORRESPONDENT.]

VANCOUVER, Wash., February 14, 1924.—The work of installing the machinery in the paper-mill building of the Columbia River Paper Mills here will be started about March 1, according to Ernest Schweitz, engineer in charge of the work. Nearly all of the paper-making machinery is here and the plant will be operating before May 1, according to present plans.

The main paper-mill building is nearing completion and workmen are wrecking some wooden buildings located in the way of the addition of 100 feet which is to be added to the main building on the east end. Erecting the addition will not delay installing the paper machine, as that will occupy the building now under way.

Controversy Over Riparian Rights

[FROM OUR REGULAR CORRESPONDENT.]

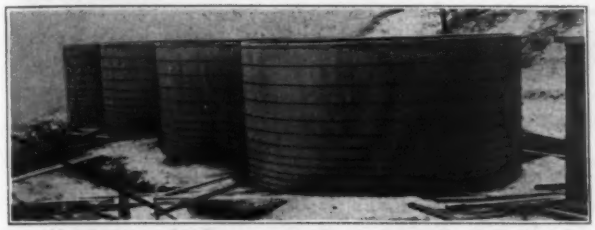
APPLETON, Wis., February 11, 1924.—An effort is being made to bring about an agreement between the Wisconsin River Pulp and Paper Company, Stevens Point, and riparian owners who claim their land is being damaged by water which backs up from the paper company's dam. The Wisconsin railroad commission had scheduled a hearing at which testimony would be taken to enable the commission to establish a maximum level of water for the dam, but the hearing has been postponed to a later date. An effort is being made to reach an agreement between the mill owners and the riparian owners so it will not be necessary to take the matter before the commission.

Government Paper Bids

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 20, 1924.—The Government Printing Office has received the following bids for 35 reams of 22 x 28 in. Duplex filled board: R. P. Andrews Paper Company at $15.20 per ream; The Whitaker Paper Company, at $17.325; Broderick Paper Company, $15.88; and Cater, Rice Corporation, $17.40.

WOOLFORD BUILT STORAGE TANKS



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$1,000.00 cash forfeit that the Stickle system for removing air and condensation from the dryers and automatic regulation of steam for drying will dry more paper evenly with less steam consumed than any equipment manufactured for the same purpose under a competitive test.

STICKLE STEAM SPECIALTIES CO. **Indianapolis, Ind.**

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING FEBRUARY 16, 1924

SUMMARY

News print .....2,618 rolls, 120 bls.
Printing paper .....222 cs., 249 rolls, 64 bls.
Hangings .....47 bls., 16 cs.
Wall paper.....52 cs., 88 bls.
Filter paper .....130 bls., 15 cs.
Packing paper.....2,192 bls., 880 rolls, 18 cs.
Wrapping paper.....2,559 rolls, 200 bls., 45 cs.
Kraft paper .....1,198 rolls, 132 bls.
Drawing paper.....68 cs.
Tracing paper..... 12 cs.
Cigarette paper ..... 77 cs.
Tissue paper..... 21 cs.
Surface-coated paper.....91 cs.
Decalcomania paper..... 3 cs.
Litho paper .....25 cs.
Colored paper .....40 cs.
Writing paper .....20 cs.
Blueprint paper .....57 rolls.
Duplex transfer paper ..... 3 cs.
Transfer paper .....16 cs.
Crepe paper .....64 cs.
Miscellaneous paper,
213 cs., 332 bls., 5,271 rolls, 96 bdls.

CIGARETTE PAPER

Liggett & Myers Tobacco Co., Editor, Havre, 25 cs.
Rose & Frank, by same, 40 cs.
Zorro Tobacco Co., Asia, Lisbon, 12 cs.

WALL PAPER

A. C. Dodman, Jr., Inc., Mongolia, Antwerp, 7 cs.
A. C. Dodman, Jr., Inc., by same, 36 bls.
A. C. Dodman, Jr., Inc., Berengaria, Liverpool, 7 bls.
A. C. Dodman, Jr., Inc., by same, 3 cs.
F. J. Emmerich, by same, 1 cs.
F. J. Emmerich, by same, 12 bls.
Whiting & Patterson, by same, Havre, 28 cs.
F. J. Emmerich, A. Ballin, Hamburg, 8 bls.
The Prager Co., by same, 6 cs.
Bernard Judae & Co., Andania, Hamburg, 14 bls.
F. J. Emmerich, by same, 3 bls.
F. J. Emmerich, by same, Southampton, 18 bls.
F. J. Emmerich, by same, 2 cs.
A. C. Dodman, Jr., Inc., by same, 5 cs.
R. F. Downing & Co., Inc., London, 20 bls.
F. J. Emmerich, Cedric, Liverpool, 3 bls.

PAPER HANGINGS

A. C. Dodman, Jr., Inc., Cedric, Liverpool, 29 bls.
A. C. Dodman Jr., Inc., by same, 15 cs.
W. H. S. Lloyd & Co., Maine, London, 1 cs.
W. H. S. Lloyd & Co., by same, 18 bls.

FILTER PAPER

H. Reeve Angel & Co., Inc., Maine, London, 10 cs.
A. Giese & Son, Alaska, Havre, 31 bls.
Bernard Judae & Co., Andania, Hamburg, 5 cs.
J. Manheimer, Berengaria, Bordeaux, 99 bls.

WRITING PAPER

Coenca, Morrison & Co., Berengaria, Havre, 3 cs.
Thomas & Pierson, by same, 2 cs.
Gimbout Freres, Editor, Havre, 13 cs.
R. H. Macy & Co., Mongolia, Rotterdam, 2 cs.

NEWS PRINT

Parsons & Whittemore, Westfalen, Bremen, 240 rolls.
Parsons & Whittemore, E. Coast, Helsingfors, 1,335 rolls.
Equitable Trust Co., Pr. Roosevelt, Bremen, 533 rolls.
W. Hartmann & Co., Endicott, Hamburg, 82 rolls.
J. H. Scott Paper Co., A. Ballin, Hamburg, 58 rolls.
International Acceptance Bank, by same, 84 rolls.
International Acceptance Bank, Georgia, Trieste, 120 bls.
International Acceptance Bank, Andania, Hamburg, 168 rolls.
Chemical National Bank, by same, 40 bls.
Bowater Paper Co., by same, 78 bls.

PRINTING PAPER

Traders Paper Co., Andania, Hamburg, 75 cs.
P. Puttmann, Zeeland, Antwerp, 12 cs.
H. Reeve Angel & Co., Inc., Maine, London, 2 cs.
B. F. Drakenfeld & Co., Celtic, Liverpool, 37 cs.
J. H. Scott Paper Co., A. Ballin, Hamburg, 18 bls.
Young Publishing Co., by same, 180 rolls.
Falsing Paper Co., by same, 52 cs.
C. Steiner, Bremen, Bremen, 11 cs.
M. O'Meara Co., by same, 46 bls.
C. Steiner, Sahale, Rotterdam, 22 cs.
Perkins, Goodwin & Co., Endicott, Hamburg, 69 rolls.
C. Steiner, Mongolia, Rotterdam, 11 cs.

COLORED PAPER

C. W. Williams & Co., Mongolia, Antwerp, 16 cs.
Borden & Riley Paper Co., by same, 8 cs.
Borden & Riley Paper Co., Zeeland, Antwerp, 16 cs.

SURFACE COATED PAPER

Gevaert Co. of America, Mongolia, Antwerp, 8 cs.
Globe Shipping Co., Bremen, Bremen, 31 cs.
Globe Shipping Co., Westfalen, Bremen, 52 cs.

LITHO PAPER

B. C. Ritchie, C. of Corinth, Canton, 25 cs.

BLUE PRINT PAPER

Keuffel & Esser, A. Ballin, Hamburg, 57 rolls.

DRAWING PAPER

H. Reeve Angel & Co., Inc., Maine, London, 4 cs.
Keuffel & Esser, A. Ballin, Hamburg, 39 cs.
E. Dietzgen & Co., Endicott, Hamburg, 25 cs.

WRAPPING PAPER

Wilkinson Bros. Co., Inc., Endicott, Hamburg, 59 rolls.
U. S. Steel Products Corp., Drottningholm, Gothenburg, 37 rolls.
C. K. MacAlpine & Co., by same, 129 rolls.
C. K. MacAlpine & Co., by same, 45 cs.
Arkell Safety Bag Co., by same, 49 bls.
Arkell Safety Bag Co., by same, 97 rolls.
Wilkinson Bros. Co., Inc., by same, 36 rolls.
Wilkinson Bros. Co., Inc., by same, 151 bls.
American Express Co., by same, 2,146 rolls.
C. Steiner, Westfalen, Bremen, 55 rolls.

PACKING PAPER

M. O'Meara Co., Westfalen, Bremen, 83 bls.
J. P. Heffernan Paper Co., Andanian, Hamburg, 79 bls.
National City Bank, A. Ballin, Hamburg, 207 rolls.
Du Pont Cellophane Co., Berengaria, Hamburg, 18 cs.
M. O'Meara Co., Bremen, Bremen, 1,363 bls.
M. O'Meara Co., Sahale, Rotterdam, 661 rolls.
Republic Bag & Paper Co., by same, 551 bls.
Wilkinson Bros. Co., Inc., by same, 116 bls.
Wilkinson Bros. Co., Inc., by same, 12 rolls.

DUPLEX TRANSFER PAPER

O. Hommel & Co., Bremen, Bremen, 3 cs.

TRANSFER PAPER

Martin & Bechtold, Bremen, Bremen, 16 cs.

DECALCOMANIA PAPER

Phoenix Shipping Co., Bremen, Bremen, 3 cs.

TRACING PAPER

Globe, Shipping Co., Bremen, Bremen, 7 cs.
Keuffel & Esser, A. Ballin, Hamburg, 5 cs.

CREPE PAPER

J. W. Hampton Jr., & Co., Westfalen, Bremen, 64 cs.

TISSUE PAPER

F. C. Strype, Cedric, Liverpool, 19 cs.
W. J. Byrnes, by same, 2 cs.

KRAFT PAPER

W. Hartmann Co., A. Ballin, Hamburg, 1,198 rolls.
W. Hartmann Co., by same, 132 bls.

PAPER

Wilkinson Bros. Co., Inc., A. Ballin, Hamburg, 18 rolls.
F. C. Strype, by same, 8 cs.
American Exchange National Bank, by same, 45 cs.
A. L. Diament Co., Rochambeau, Havre, 2 cs.
International Forwarding Co., by same, 11 cs.
Rose & Frank, by same, 18 cs.
C. H. Boulin, by same, 36 cs.
Mischel & Williams, Georgia, Trieste, 68 rolls.
P. C. Zuhlke, Zeeland, Antwerp, 83 cs.
Martin & Bechtold, Westfalen, Bremen, 10 cs.
Blauvelt & Wiley Paper Mfg. Co., Tuscania, Glasgow, 96 bdls.
National City Bank, Bergensfjord, Kristiania, 521 rolls.
National City Bank, Drottningholm, Gothenburg 20 rolls.
National City Bank, by same, 153 bls.
Whiting & Patterson, by same, 396 rolls.
The Borregaard Co., by same, 2,833 rolls.
The Borregaard Co., by same, 179 bls.
D. S. Walton & Co., by same, 1,415 rolls.

RAGS, BAGGING, ETC.

Castle & Overton, Pythias, Marseilles, 60 bls. rags.
Waste Material Trading Corp., by same, 260 bls. rags.
R. Wolf, Georgia, Trieste, 61 bls. rags.
Union National Bank, by same, 112 bls. rags.
Mechanics & Metals National Bank, by same, 32 bls. rags.
Katzenstein & Keene, Inc., Balsam, Dublin, 380 bls. rags.
Brown Bros. & Co., by same, 188 bls. waste paper.
C. R. Spence & Co., Inc., by same, 158 bls. bagging.
M. O'Meara, by same, Belfast, 55 bls. paper stock.
American Exchange National Bank, Andania, Hamburg, 199 bls. rags.
M. Wolfe, Toloa, Havana, 30 bls. rags.
Equitable Trust Co., Primero, Barcelona, 123 bls. cotton waste.
New York Trust Co., Maine, London, 184 bls. paper stock.
E. J. Keller Co., Inc., A. Ballin, Hamburg, 33 bls. rags.
E. J. Keller Co., Inc., Cleveland, Hamburg, 41 bls. rags.
E. J. Keller Co., Inc., Zarembo, Bordeaux, 64 bls. rags.
E. J. Keller Co., Inc., Mt. Carroll, Hamburg, 46 bls. rags.
E. J. Keller Co., Inc., Oscar II, Copenhagen, 863 bls. rags.
E. J. Keller Co., Inc., Ala, Antwerp, 56 bls. flax waste.
E. J. Keller Co., Inc., Grootendyk, Rotterdam, 602 bls. rags.
A. W. Fenton, Inc., by same, 126 bls. rags.
E. Butterworth & Co., Inc., by same, 174 bls. bagging.
L. H. Abenheimer, Endicott, Hamburg, 108 bls. rags.
Equitable Trust Co., Falls City, Liverpool, 70 bls. paper stock.
Salomon Bros. Co., Idaho, Antwerp, 157 bls. flax waste.
Katzenstein & Keene, Inc., Tuscania, Glasgow, 56 bls. bagging.

(*Continued on page 62*)

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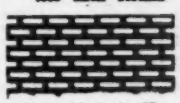

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New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, February 20, 1924.

A better feeling pervades the paper market as the demand continues to increase and prices show every sign of becoming firmer all the time. There have been few actual changes in quotations, but manufacturers do not believe that this condition can continue much longer and it is believed that there will be some revisions, particularly in the pulps within a short time.

As things stand now the pulps are still a little behind some of the other raw materials. The fact that chemicals have shown a marked tendency to become brisker during the past seven days is considered a good sign since many of them must be used in making pulp.

It also appears that the supplies of foreign pulp which were such stiff competitors for the domestic business are running low. This has been expected for a long time since the Scandinavian ports are mostly icebound and it was just a question of how long it would take to sell out the cheap foreign pulps in warehouses on this side of the water.

Prices have remained the same in the pulps but there is evidence that they are growing firmer now that the demand has improved. Some of the papers are still slow notably coarse paper and tissues but these too are in much better condition than they were.

News print is still ahead of the market and the fact that ground wood has gone down some in the last two weeks does not seem to indicate any slackness among news mills. It seems to be due rather to stiff competition.

Fine papers are still jogging along at about the same rate that they have been since the beginning of the New Year with little indication that there is going to be any change for some little time yet. Prices remain fairly firm and trading in the open market has grown neither greater nor less to change them.

Coarse papers also are unchanged with a fairly good demand keeping manufacturers and dealers in an optimistic frame of mind. They say that the demand is not yet quite as good as they had hoped, but that there is every reason to believe that it is due for a pickup within a few weeks since the ultimate consumer is using just as much of these grades as ever.

Tissue is also in about the same condition as it has been for the past few weeks. The price on all of the grades remains just about the same with apparently no changes in either on direction or the other.

Board is also just running along about the same. Manufacturers say that they are succeeding in disposing of their production with fairly satisfactory speed and prices are at just about the same level as they have been for some time with the exception of the usual minor alterations which often occur in board, but which do not necessarily make the market.

Mechanical Pulp

Changes in ground wood have been slight during the past week. The price remains fairly firm at the low level of thirty-two dollars a ton, although some lots have been sold in isolated cases for less than this where dealers or manufacturers seem to be anxious to get rid of their production.

Chemical Pulp

The same is true of chemical pulp. There have been some downward revisions of quotations particularly in the sulphites but on the whole it looks as though a period of rapid price change were drawing to a close. Dealers report that the demand has improved a little and a much firmer undertone pervades the whole market.

Rags

Rags have shown a great deal of activity during the past week or ten days and there has been a corresponding increase all along the line particularly in old rags and roofing stock. While the higher grades have not grown more expensive in the same ratio as the others they have been following along pretty steadily with a consequent increase in quotations.

Old Rope and Bagging

Dealers in old rope report that they are doing a good business. This is the season for a pickup in this commodity and it seems that the trade is taking good advantage of it. Bagging is also in fairly good demand with the paper industry showing more and more interest in it. Prices on both commodities have remained just about the same during the week.

Waste Paper

Business in waste paper continues good this week after the change for the better that came about a fortnight ago. Prices seem to be holding up with no signs of sagging and dealers report that there is a particularly good demand for some of the lower grades. The higher grades, however, are not far behind and there is every reason to believe that the improvement which has set in will continue until spring.

American Writing Superintendents Surprised

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., February 19, 1924.—The three superintendents of the American Writing Paper Company who are retiring from their posts were pleasantly surprised Friday by their employees and associates and given mementoes of the feeling of esteem and affection from them. George L. Robinson for a number of years superintendent of the Riverside Division was presented with a gold chain, a silk umbrella and box of cigars, the presentation being made by Herman Gresselt who will succeed him as superintendent. Mr. Robinson has been transferred to the Parsons Division of the Company.

Thomas Duff, superintendent of the Beebe Holbrook Division who resigned to accept a position with the Southern Cotton and Paper Company was presented with a purse of gold the presentation address being made by William Astley, who succeeds him.

William Matthieson who takes the superintendency of the Beebe & Holbrook Division was presented with a Hamilton watch and chain, the address being made by Edward Sussenguth, the office manager.

Anglo-American Paper Co. Formed

The Anglo-American Paper Company., Ltd., is a new concern that has just been incorporated in Canada with headquarters in Merriton, Ont. A mill will be constructed early this spring for the manufacture of lines of lightweight papers not now made in Canada. The company's charter authorizes a capital of 10,000 preferred shares of $100 par value and 10,000 common shares. The officers of the new company are: William H. Howe, Hammermill Paper Co., president; L. H. Gardner, Garden City Paper Mills Company, Ltd., vice president; Charles V. Syrett, Canadian Vegetable Parchment Company, Ltd., secretary, and Leo E. Charles, treasurer.

Bryant Paper Co. Has Prosperous Year

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., February 18, 1924.—The board of directors of the Bryant Paper Company was increased from nine to ten in number, at the annual meeting of the stockholders. H. E. Floercky was added to the board. Those re-elected were Felix Pagenstecher, C. A. Fox, W. B. Milham, Joseph E. Brown, V. T. Barker, Charles Clarage, E. M. Irish, S. G. Allen, Kalamazoo, and E. L. Brooks, Cleveland.

Market Quotations

PAPER STOCK SECURITIES

New York Stock Exchange closing quotations February 19, 1924

	BID	ASKED
American Writing Paper Company, pref.	2½	2¾
International Paper Company, com.	36¼	36½
International Paper Company, pref. stamped	64½	64¾
Union Bag & Paper Corporation	59½	60

Paper

F. o. b. Mill	
Ledgers	11.00 @ 38.00
Bonds	9.00 @ 45.00
Writings—	
Extra Superfine	14.00 @ 30.00
Superfine	14.00 @ 30.00
Tub Sized	10.00 @ 15.00
Engine Sized	8.00 @ 11.00
News—f. o. b. Mill—	
Rolls, contract	3.75 @ 4.00
Rolls, transit	3.75 @ 4.25
Sheets	4.25 @ 4.50
Side runs	3.50 @ 4.15
Book, Cased—f. o. b. Mill—	
S. & S. C.	7.25 @ 9.00
M. F.	7.10 @ 8.85
Coated and Enamel	9.00 @ 14.00
Lithograph	9.00 @ 14.00
Tissues—f. o. b. Mill—	
White No. 1	.80 @ .90
White No. 2	.85 @ .95
Colored	1.15 @ 2.00
Anti-Tarnish	1.50 @ 2.00
Kraft	.95 @ 1.15
Manila	.78 @ .85
Kraft—f. o. b. Mill—	
No. 1 Domestic	5.85 @ 6.20
No. 2 Domestic	5.15 @ 5.75
Imported	4.75 @ 5.20
Manila—	
No. 1 Jute	7.50 @ 9.00
No. 2 Jute	7.75 @ 8.50
No. 1 Wood	4.75 @ 5.25
No. 2 Wood	4.00 @ 4.50
Butchers	4.25 @ 4.75
Fibre Papers—	
No. 1 Fibre	5.50 @ 5.75
No. 2 Fibre	5.00 @ 5.25
Common Bogus	3.50 @ —
S. Screening	3.25 @ 3.75
Card Middles	4.00 @ 5.00
Boards—per ton—	
News	55.00 @ 60.00
Straw	61.00 @ 63.00
Chip	50.00 @ 55.00
Binders' Boards	70.00 @ 75.00
Sgl. Mla. Lt. Chip	65.00 @ 75.00
Wood Pulp	70.00 @ 75.00
Container	70.00 @ 80.00
Sulphate Screenings—	
Coarse	.80 @ .90
Refined	1.75 @ 2.00
Ground Wood—	
Screenings	20.00 @ 25.00
Glassine—	
Bleached, basis 25 lbs.	12.00 @ 15.00
Bleached, basis 20 lbs.	14.00 @ 17.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported 32.00 @ 34.00

(F. o. b. Mill)

No. 1 Domestic 32.00 @ 34.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—	
Bleached	3.95 @ 4.10
Easy Bleaching	2.90 @ 3.10
No. 1 strong unbleached	3.05 @ 3.15
No. 2 strong unbleached	2.40 @ 2.60
No. 1 Kraft	2.85 @ 3.05
Sulphate—	
Bleached	3.90 @ 4.00
(F. o. b. Pulp Mill)	
Sulphite (Domestic)—	
Bleached	3.90 @ 4.20
Easy Bleaching Sulphite	2.90 @ 3.05
News Sulphite	2.50 @ 2.90
Mitscherlich	2.90 @ 3.00
Kraft (Domestic)	2.65 @ 2.90
Soda Bleached	4.00 @ 4.20

Domestic Rags

New

Prices to Mill, f. o. b. N. Y.

Shirt Cuttings—	
New White, No. 1	13.00 @ 13.50
New White, No. 2	6.25 @ 6.75
Silesias, No. 1	7.25 @ 7.75
New Unbleached	10.50 @ 11.00
Washables	5.26 @ 6.15
Fancy	6.25 @ 6.75
Blue Overall	7.15 @ 8.15
New Blue	5.00 @ 5.50
New Black Soft	4.65 @ 5.15
New Light Seconds	2.75 @ 3.00
O. D. Khaki Cuttings	4.04 @ 4.15
Men's Corduroy	3.65 @ 4.00
New Canvas	6.40 @ 7.00
New Black Mixed	2.50 @ 2.75
White, No. 1—	
Repacked	6.25 @ 6.75
Miscellaneous	5.50 @ 5.75
White, No. 2—	
Repacked	4.00 @ 4.25
Miscellaneous	3.50 @ 3.65
St. Soiled, White	2.80 @ 3.00
Thirds and Blues—	
Repacked	3.00 @ 3.25
Miscellaneous	2.35 @ 2.45
Black Stockings	3.00 @ 3.25
Roofing Rags—	
Cloth Strippings	2.30 @ 2.40
No. 1	2.05 @ 2.15
No. 2	1.25 @ 1.35
No. 3	1.20 @ 1.30
No. 4	1.20 @ 1.30
No. 5A	1.50 @ 1.60

Foreign Rags

New Light Silesias	7.00 @ 7.75
Light Flannelettes	8.00 @ 8.25
Unbl'chd Cottons	9.00 @ 9.50
New White Cuttings	10.50 @ 11.50
New Light Oxfords	7.25 @ 7.75
New Light Prints	6.75 @ 7.25
New Mixed Cuttings	2.50 @ 2.75
New Dark Cuttings	2.00 @ 2.25
No. 1 White Linens	9.00 @ 10.00
No. 2 White Linens	7.00 @ 8.00
No. 3 White Linens	6.00 @ 6.50
No. 4 White Linens	4.00 @ 5.00
Old Extra Light Prints	3.15 @ 3.25
Ord. Light Prints	2.75 @ 3.00
Med. Light Prints	2.40 @ 2.50
Dutch Blue Cotton	3.25 @ 3.50
German Blue Cottons	3.00 @ 3.20
Ger. Blue Linens	3.00 @ 3.25
Checks and Blues	2.00 @ 2.15
Dark Cottons	2.00 @ 2.10
Shoppery	1.75 @ 1.85
French Blues	3.25 @ 3.50

Bagging

Prices to Mill F. o. b. N. Y.

Gunny No. 1—	
Foreign	1.30 @ 1.40
Domestic	1.20 @ 1.30
Wool, Tares, light	1.30 @ 1.40
Wool, Tares, heavy	1.40 @ 1.50
Bright Bagging	1.10 @ 1.20
Sound Bagging	.90 @ 1.00
Manila Rope—	
Foreign	6.25 @ 6.50
Domestic	6.50 @ 6.75
New Bu. Cut	2.15 @ 2.25
Hessian Juts Threads—	
Foreign	2.00 @ 2.25
Domestic	2.00 @ 2.10

Twines

Cotton—(F. o. b. Mill)—	
No. 1	.30 @ .38
No. 2	.29 @ .31
No. 3	.34 @ .36
India, No. 6 basis—	
Light	.17 @ .18
Dark	.16 @ .17
B. C., 18 basis	.41 @ .42
A. B. Italian, 18 Basis	.51 @ .61
Finished Jute—	
Dark, 18 basis	.29 @ .30
Light, 18 basis	.26 @ .27
Jute Wrapping, 3-6 Ply—	
No. 1	.20 @ .23
No. 2	.18 @ .20
Tube Rope—	
4-ply and larger	.15 @ .17
Fine Tube Yarn—	
5-ply and larger	.19 @ .21
4-ply	.20 @ .22
3-ply	.20 @ .22
Unfinished India—	
Basis	.16 @ .17
Paper Makers' Twine Balls	.09 @ .11
Box Twine, 2-3 ply	.14 @ .15
Jute Rope	.15 @ .16
Amer. Hemp, 6	.30 @ .32
Sisal Hay Rope—	
No. 1 Basis	.14 @ .16
No. 2 Basis	.10 @ .12
Sisal Lath Yarn—	
No. 1	.14 @ .15
No. 2	.11 @ .13
Manila Rope	.18 @ .19

Old Waste Papers

(F. o. b. New York)

Shavings—	
Hard, White, No. 1	4.00 @ 4.10
Hard, White, No. 2	3.15 @ 3.25
Soft, White, No. 1	3.10 @ 3.30
Flat Stock—	
Stitches	1.70 @ 1.80
Over Issue Mag.	1.70 @ 1.80
Solid Flat Book	1.50 @ 1.60
Crumbled No. 1	1.25 @ 1.35
Solid Book Ledger	2.15 @ 2.25
Ledger Stock	1.90 @ 2.05
New B. B. Chips	.65 @ .80
Manilas—	
New Env. Cut	2.45 @ 2.55
New Cut No. 1	1.75 @ 2.00
Extra No. 1 old	1.30 @ 1.40
Print	1.10 @ 1.25
Container Board	.90 @ 1.00
Bogus Wrapper	.90 @ 1.00
Old Krafts Machine compressed bales	2.15 @ 2.25
News—	
No. 1 White News	2.15 @ 2.25
Strictly Overissue	1.15 @ 1.25
Strictly Folded	.85 @ .95
No. 1 Mixed Paper	.65 @ .75
Common Paper	.45 @ .55

CHICAGO

[FROM OUR REGULAR CORRESPONDENT.]

Paper

F. o. b. Mill	
All Rag Bond	35 @ 40
No. 1 Rag Bond	30 @ 35
No. 2 Rag Bond	14 @ 25
Water Marked Sulphite	9 @ 12
Sulphite Bond	7½ @ 10¾
Sulphite Ledger	9½ @ 12
Superfine Writing	18 @ 24
No. 1 Fine Writing	14 @ 18
No. 2 Fine Writing	12 @ 14
No. 3 Fine Writing	9 @ 12
No. 1 M. F. Book	5¾ @ 7½
No. 1 S. & S. C. Book	6¾ @ 7¾
Coated Book	8 @ 10
Coated Label	8 @ 10
News—Rolls, mill	3¾ @ 4½
News—Sheets, mill	4 @ 4¾
No. 1 Manila	5 @ 6
No. 1 Fibre	5¼ @ 5¾
No. 22 Manila	4¾ @ 5
Butchers' Manila	4½ @ —
No. 1 Kraft	6 @ 6¼
No. 2 Kraft	5½ @ 6
Wood Tag Boards	4½ @ 6
Screenings	2¾ @ 3
Boards, per ton—	
Plain Chip	45.00 @ 47.50
Solid news	50.00 @ 52.50
Manila Line Chip	57.00 @ 60.00
Container Lined—	
85 Test	60.00 @ 65.00
100 Test	65.00 @ 70.00

Old Papers

F. o. b Chicago

Shavings—	
No. 1 Hard White	3.65 @ 3.70
No. 1 Soft Shav.	3.10 @ 3.25
No. 1 Mixed	1.25 @ 1.35
No. 2 Mixed	1.15 @ 1.25
White Envel. Cuttings	3.50 @ 3.75
Ledgers and Writings	1.80 @
Solid Books	1.75 @
No 1 Books, Light	1.45 @ 1.50
Blanks	2.40 @ 2.50
Ex. No. 1 Manila	2.35 @ 2.45
Manila Envelope Cuttings	2.50 @ 2.60
No. 1 Manilas	1.50 @ 1.55
Folded News (over issue)	1.25 @ —
Old Newspaper	1.15 @ —
Mixed Papers	1.05 @ 1.10
Straw Clippings	1.10 @ 1.15
Binders' Clippings	1.10 @ —
Kraft	2.40 @ 2.50
New Kraft Cuts	2.65 @ —
Roofing Stock, f. o. b. Chicago, Net Cash—	
No. 1	46.00 @
No. 2	44.00 @ —
No. 3	42.00 @
No. 4	42.00 @

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Bonds	.10 @ .60
Ledgers	.13 @ .40
Writings—	
Superfine	.15 @ .20
Extra fine	.12 @ .22
Fine	.20 @ .30
Fine, No. 2	.20 @ .25
Fine, No. 3	.15 @ .20
Book, M. F.	.06 @ .11
Book, S. S. & C.	.08 @ .15
Book, Coated	.08 @ .15
Coated Lithograph	.10 @ .15
Label	.08 @ .15
News	.05 @ .07
No. 1 Jute Manila	.12 @ .13
Manila Sul., No. 1	.08 @ .10
Manila No. 2	.07½ @ .08
No. 2 Kraft	— @ .10
No. 1 Kraft	— @ .11
Common Bogus	.02½ @ .03
Straw Board	75.00 @ 85.00
News Board	65.00 @ 70.00
Chip Board	62.50 @ 67.00
Wood Pulp Board. (Carload Lots)	1.25 @ 1.50
Binder Boards—	
Per ton	75.00 @ 80.00
Carload lots	75.00 @ 80.00
Tarred Felts—	
Regular	48.00 @ 50.00
Slaters	54.00 @ 56.00
Best Tarred, 1-ply (per roll)	1.35 @ 1.50
Best Tarred, 2-ply (per roll)	1.00 @ 1.15
Best Tarred, 3-ply	1.50 @ 1.65

Bagging

F. o. b. Phila.

Gunny No. 1—	
Foreign	1.25 @ —
Domestic	1.20 @ 1.25
Manila Rope	5.00 @ 6.00
Sisal Rope	.75 @ .80
Mixed Rope	.75 @ .80
Scrap Burlaps	1.00 @ 1.25
Wool Tares, heavy	2.50 @ 2.75
Mixed Strings	.75 @ .90
No. 1, New Lt. Burlap	1.75 @ 2.00
New Burlap Cuttings	1.75 @ 2.10

Old Papers

F. o. b. Phila.

Shavings—	
No. 1, Hard White	4.25 @ 4.40
No. 2, Hard White	3.50 @ 3.75
No. 1 Soft White	3.25 @ 3.50
No. 2 Soft White	2.15 @ 2.25

(Continued on page 64)

Imports and Exports of Paper and Paper Stock

(*Continued from page* 58)

State bank, Rhode Island, Leith, 413 bls. rags.
International Aceptance Bank, by same, 67 bls. rags.
Guaranty Trust Co., by same, 117 bls. rags.
Guaranty Trust Co., by same, 135 bls. bagging.
Salomon Brcs. Co., Cartier, Antwerp, 50 bls. thread waste.
New York Trust Co., Rochambeau, Havre, 40 bls. rags.
E. J. Keller Co., Inc., by same, 43 bls. rags.
E. J. Keller Co., Inc., by same, 19 bls. new cuttings.
Castle & Overton, by same, 102 bls. rags.
Brown Bros. Co., Korean Prince, Alexandria, 657 bls. rags.
Castle & Overton, by same, 68 bls. rags.
Castle & Overton, Cartier, Antwerp, 664 bls. rags.
Castle & Overton, Masaniello, Barcelona, 83 bls. rags.
E. J. Keller Co., Inc., Bremen, Bremen, 75 bls. rags.
Goldman Sachs Co., by same, 276 bls. rags.
Chemical National Bank, by same, 133 bls. rags.
Chemical National Bank, Pr. Roosevelt, Bremen, 87 bls. rags.
International Acceptance Bank, by same, 171 bls. rags.
Goldman Sachs & Co., by same, 41 bls. rags.
Brown Bros. & Co., Boston City, Bristol, 131 bls. rags.
Brown Bros. & Co., by same, 177 bls. waste paper.
Guaranty Trust Co., by same, 93 bls. rags.
Second National Bank of Boston, by same, 231 bls. rags.
E. Butterworth & Co., Inc., by same, 192 bls. rags.
Katzenstein & Keene, Inc., Editor, Havre, 24 bls. rags.
Leshner Paperstock Co., by same, 198 bls. bagging.

OLD ROPE

Castle & Overton, Oscar II, Copenhagen, 116 coils.
Castle & Overton, Rochambeau, Havre, 38 coils.
Wilkinson Bros. Co., Inc., Pythias, Genoa, 49 coils.
Brown Bros. Co., Zeeland, Antwerp, 23 coils.
Brown Bros. Co., by same, 92 bales.
Brown Bros. Co., Boston City, Bristol, 103 coils.
Brown Bros. Co., Mongolia, Rotterdam, 99 coils.
Brown Bros. Co., Marengo, Hull, 327 coils.
Ellermans Wilson Line, by same, 74 coils.
Ellermans Wilson Line, Maine, London, 108 coils.
Ellermans Wilson Line, Pr. Van Buren, London, 137 coils.
Salomon Bros. Co., Masaniello, Antwerp, 189 coils.

WOOD PULP

M. Gottesman & Co., Inc., Georgia, Trieste, 300 bls. wood pulp.
R. F. Hammond, Inc., Teresa, Trieste, 700 bls. wood pulp, 100 tons.
R. F. Hammond, Inc., Virginia, Christiania, 500 bls. wood pulp, 100 tons.
R. F. Hammond, Inc., Polarhavet, Sundsvall, 2,400 bls. sulphite, 400 tons.
E. M. Sergeant & Co., Polarhavet, Hermosand, 2,550 bls. sulphite pulp.
J. Andersen & Co., by same, 600 bls. sulphite pulp.
Castle & Overton, Westfalen, Bremen, 68 bls. wood pulp.
Castle & Overton, Drottningholm, Gothenburg, 600 bls. wood pulp.
Nilsen, Lyon & Co., by same, 2 bls. wood pulp.
Parsons & Whittemore, by same, 500 bls. wood pulp.
Scandinavian Pulp Agency, Inc., by same, 762 bls. wood pulp.
The Booregaard Co., Bergenafjord, Kristiania, 1 bl. wood pulp.
R. F. Hammond, Inc., by same, 1,000 bls. wood pulp, 200 tons.
R. F. Hammond, Inc., Topdalsfjord, Kristiania, 1,500 bls. wood pulp, 300 tons.
Bulkley Dunton & Co., by same, 200 bls. mechanical pulp.
E. M. Sergeant & Co., by same, 125 bls. mechanical pulp.
New York Trust Co., by same, 1,250 bls. mechanical pulp.
Central Union Trust Co., by same, 500 bls. mechanical pulp.
J. Andersen & Co., by same, 1,200 bls. mechanical pulp.
Nilsen, Lyon & Co., by same, 2,500 bls. mechanical pulp.
Nilsen, Lyon & Co., by same, 300 bls. sulphite pulp.
Perkins, Goodwin & Co., by same, Drammen, 125 bls. sulphite pulp.
E. Butterworth & Co., Frederick VIII, Copenhagen, 180 bls. wood pulp.
H. Hollesen, Bremen, Bremen, 2,000 bls. wood pulp.
Lagerloef Trading Co., Eastern Coast, Bremen, 135 bls., 20 tons, wood pulp.

WOOD FLOUR

Equitable Trust Co., Drottningholm, Gothenburg, 254 bags.

CHINA CLAY

English Clay Sales Corp., Boston City, Bristol, 30 casks.

BALTIMORE IMPORTS

WEEK ENDING FEBRUARY 16, 1924

R. F. Hammond, Inc., Stureholm, Gothenburg, 500 bls. wood pulp, 100 tons.
Woodpulp Trading Co., Ltd., Polarhavet, Sundsvall, 4,800 bls. dry sulphite pulp.
J. Andersen & Co., by same, 1,500 bls. dry sulphite pulp.
Pagel, Horton & Co., Inc., by same, 1,950 bls. dry sulphite pulp.
H. Donaldson, Westfalen, Bremen, 600 bls. dry sulphite pulp.
H. Hollesen, by same, 2,872 bls. dry sulphite pulp.
Castle & Overton, Berk, Germany, 10,000 bls. wood pulp.
Castle & Overton, Glenridge, Rotterdam, 234 bls. wood pulp.
E. J. Keller Co., Inc., Clara, Trieste, 1,355 bls. wood pulp.
Lagerloef Trading Co., West, Maximus, 3,459 bls., 500 tons wood pulp; 3,549 bls. wood pulp, 675 tons.
Johaneson, Wales & Sparre, Inc., Stureholm, Gothenburg, 3,125 bls. sulphate; 4,000 bls. sulphite.
Johaneson, Wales & Sparre, Inc., Maridal, Kramfors, 9,540 bls. sulphite, from Frano, 1,500 bls. sulphate.
Johaneson, Wales & Sparre, Inc., Furst Bulow, Hamburg, 300 bls. sulphite.

PHILADELPHIA IMPORTS

WEEK ENDING FEBRUARY 16, 1924

Parsons & Whittemore, Westfalen, Bremen, 68 rolls newsprint.
Paper House of Parsons, E. Coast, Helsingfors, 160 rolls newsprint.
Corn Exchange Bank, by same, 225 rolls, newsprint.
Katzenstein & Keene, Inc., Westfalen, Bremen, 93 bls. rags.
Katzenstein & Keene, Inc., Waukegan, Havre, 72 bls. rags.
Katzenstein & Keene, Inc., Chile Maru, Hamburg, 248 bls. rags.
Katzenstein & Keene, Inc., by same, 55 bls. bagging.
Katzenstein & Keene, Inc., Editor, Havre, 23 bls. bagging.
Katzenstein & Keene, Inc., by same, 22 bls. rags.
Waste Material Trading Corp., by same, 158 bls. rags.
Castle & Overton, by same, 94 bls. rags.
E. J. Keller Co., Inc., by same, 89 bls. rags.
E. J. Keller Co., Inc., F. Bulow, Hamburg, 228 bls. rags.
E. J. Keller Co., Inc., by same, 80 bls. jute waste.
E. J. Keller Co., Inc., by same, Stockholm, 529 bls. rags.
E. J. Keller Co., Inc., Norfolk Range, Leith, 44 bls. rags.
E. J. Keller Co., Inc., Grete, Hamburg, 488 bls. rags.
E. J. Keller Co., Inc., Virginia, Copenhagen, 742 bls. rags.
E. H. Keller Co., Inc., by same, 111 bls. new cuttings.
E. J. Keller Co., Inc., Naperian, Antwerp, 421 bls. rags.
E. J. Keller Co., Inc., M. Importer, Manchester, 70 bls. new cuttings.
E. J. Keller Co., Inc., Chile Maru, Hamburg, 317 bls. rags.
E. J. Keller Co., Inc., Ansaldo II, Genoa, 222 bls. cotton waste.
Castle & Overton, Chile Maru, Hamburg, 157 bls. rags.
Castle & Overton, Mar Blanco, Spain, 294 bls. rags.
J. Steck, Rhode Island, Leith, 21 bls. bagging.
Old Colony Trust Co., by same, 87 coils old rope.
E. J. Keller Co., Inc., Virginia, Copenhagen, 53 coils old rope.
Castle & Overton, Alexandra, Sweden, 840 bls. wood pulp.
Castle & Overton, by same, Germany, 100 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING FEBRUARY 16, 1924

Bulkley, Dunton & Co., Polarhavet, Soderham, 1,000 bls. air dry sulphite pulp.
Bulkley, Dunton & Co., by same, 3,750 bls. air dry sulphate pulp.
J. Andersen & Co., by same, Hermosand, 3,000 bls. sulphate pulp.
J. Andersen & Co., by same, 1,650 bls. sulphite pulp.
Pagel, Horton & Co., Inc. by same, 600 bls. sulphite wood pulp.
Lagerloef Trading Co., West Coast, Hermosand, 1,217 bls. wood pulp, 200 tons.
First National Bank of Boston, Harmonides, Buenos Aires, 918 bags casein.
E. J. Keller Co., Inc., West Haven, Mannheim, 111 bls. rags.
E. J. Keller Co., Inc., F. Bulow, Hamburg, 68 bls. rags.
Katzenstein & Keene, Inc., Davisian, Liverpool, 52 bls. new cuttings.
Salomon Bros. Co., Naperian, Antwerp, 126 bls. rags.

NEW ORLEANS IMPORTS

WEEK ENDING FEBRUARY 16, 1924

Castle & Overton, Louvain, Havre, 994 bls. rags.
Castle & Overton, by same, 18 bls. rope.
Castle & Overton, Bruxelles, Havre, 1,081 bls. rags.

NORFOLK IMPORTS

WEEK ENDING FEBRUARY 16, 1924

Parsons & Whittemore, Westfalen, Bremen, 200 rolls news print.

The Home of Quality

FACTORY
132ND TO 133RD ST & BROOK AVE

PAPER BAGS and SACKS

GLASSINE BAGS—SPECIALTIES

Operating a Modern Printing Plant

SCHORSCH & CO.

Manufacturers *Established 1901*

500 East 133d Street : New York

This Registered Trade Mark Octagon

on a Paper Bag Vouches for Its Good Quality

THE DRAPER FELTS

All kinds and styles of Felts for all kinds and styles of Papers.

Write us about your Felt problems and let us help you reduce your Felt Costs—we will call anywhere at any time.

DRAPER BROS. COMPANY
CANTON, MASS.
Woolen manufacturers since 1856.

Clay
300 Tons daily

Entire production of a group of mines under one management insures uniformity in quality and minimum production costs.

Let us submit samples and quote you.

AMERICAN MADE FOR AMERICAN TRADE
THE MINER EDGAR CO
110 William Street
New York

FOURDRINIER WIRES

Dandy Rolls, Cylinder Molds,
Steel, Brass and Bronze
Wire Cloth
Bank and Office Railings.

CHENEY BIGELOW WIRE WORKS
Established 1842
SPRINGFIELD MASS.

J. ANDERSEN & CO.

21 EAST 40th STREET, NEW YORK CITY

Importers of Chemical Pulps

BLEACHED and UNBLEACHED

Agents for Kellner Partington Paper Pulp Co., Ltd.
Sarpsborg, Norway; Forshaga, and Edsvalla, Sweden.
Kronstädter Papierstoff — Fabriks Actien — Gesellschaft
Mills at Tucianský, Sv. Martin

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, February 20, 1924.

The whole chemical market showed a great deal of improvement during the past week and dealers were extremely optimistic about the immediate future. Already there has been one rise in prices and all of the various commodities have shown a decided tendency to betterment since all prices have become firmer. In some of the articles listed there will of course be no change unless something very radical occurs to boost or lower the price since these are closely held and manufacturers generally keep them pretty firm over protracted periods. In others the demand among paper mills is not so great but that of other industries more than balances this condition.

BLEACHING POWDER.—Bleach has picked up a great deal during the week and there has been a consequent rise in price. Dealers say that the call for this commodity is much greater both in the paper and other industries. The price is now quoted at from 1.65 to 1.75 cents a pound with every indication that it is going to go higher before many more days.

CAUSTIC SODA.—The call for caustic soda continues to be about the same as it has been since the beginning of the new year. There is no sign of any falling off but on the other hand dealers report that it has not increased to quite the extent that they had hoped it would by this time. The price remains firm at 3.10 cents a pound on a flat basis at the works.

CASEIN.—While casein continues to lag behind some of the stronger chemicals, the demand for it is still at about the same level and it has recovered considerably from its precarious condition of a few weeks ago. The price is a trifle lower on the high range being at from 13 to 15 cents a pound.

CHINA CLAY.—China clay is still in fair demand in both the imported and domestic grades. While the amount that is coming in from Europe has not increased there seems to be buying enough to take up all that this country offers. In the domestic grades there is also good business and dealers say that the price is from $12 to $15 a ton for the domestic grades and $16 to $20 a ton for the imported grades.

CHLORINE.—Chlorine has not continued its upward rise of a few weeks ago but it is very firm at its present level with a slow but steady demand taking up most of the production. Paper manufacturers however, seem to be showing more interest in it and many inquiries are coming in to the dealers and manufacturers. The price is 3.50 to 4.50 cents a pounds in tanks.

ROSIN.—In the home grades the call for naval stores has improved and the price has gone up gradually. The paper industry seems to be taking more than it did a week ago and dealers in rosin report that the price is firm at from $5.90 to $6.00 in 280 pound barrels.

SALTCAKE.—A growing and good demand has arisen for saltcake through the glass industry which has been taking up most of the lots on the open market during the past week. The paper industry is not buying much more than it has been for several weeks, but the price still remains at from $20 to $23 a ton at which it is very firm.

SODA ASH.—Soda ash is selling fairly well like the other chemicals to which it is closely related. There has been no change in the price and trading on the open market while a little slower still continues in fairly good volume. The price remains at 1.38 cents a pound on a flat basis.

SULPHATE OF ALUMINA.—Alumina is not quite as brisk as it was at the opening of the year but at the same time the demand is not so slow as to produce any real slump. Paper manufacturers are showing interest even though they may not buy in great quantities. The price is a trifle lower being at 1.30 to 1.40 cents a pound on the commercial grade and 2.10 to 2.25 on iron free.

Market Quotations

(Continued from page 61)

No. 1 Mixed	1.60	@	1.75
No. 2 Mixed	1.25	@	1.50
Solid Ledger Stock	2.25	@	2.50
Writing Paper	2.00	@	2.25
No. 1 Books, heavy	2.00	@	2.25
No. 2 Books, light	1.40	@	1.50
No. 1 New Manila	2.75	@	3.00
No. 1 Old Manila	1.75	@	2.00
Container Manila	1.25	@	1.50
Old Kraft	2.25	@	2.50
Overissue News	1.25	@	1.35
Old Newspaper	.90	@	1.00
No. 1 Mixed Paper	1.00	@	1.10
Common Paper	.80	@	.90
Straw Board, Chip	1.00	@	1.10
Binders Bd., Chip	1.00	@	1.10

Domestic Rags—New.
Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.12	@	.12¼
New White, No. 2	.07	@	—
Silesias, No. 1	.07¼	@	.07½
New Unbleached	.10	@	.11
Washables	.04½	@	—
Fancy	.05¼	@	.05½
Cottons—according to grades—			
Blue Overall	.05½	@	.05¾
New Blue	.02¼	@	.02¾
New Black Soft	.05¾	@	.06¼
New Light Seconds	.02¾	@	.02¾
Khaki Cuttings	.11	@	.04¼
Corduroy	.03½	@	.04
New Canvas	.08¼	@	.08¾
New Black Mixed	.04	@	—
Old			
White, No. 1—			
Repacked	.06	@	.06½
Miscellaneous	.04¾	@	.04¾
White, No. 2—			
Repacked	.03½	@	.04
Miscellaneous	.03	@	.03¼
Thirds and Blues—			
Repacked	2.50	@	2.75
Miscellaneous	2.15	@	2.35
Black Stockings	2.75	@	3.00
Roofing Stock—			
No. 1	1.35	@	1.40
No. 2	1.25	@	1.30
No. 3	.75	@	.90
No. 4	1.15	@	1.20
No. 5A	1.10	@	—
B			nominal
C			nominal

BOSTON

Paper

Bonds	.09	@	.63
Ledgers	.09	@	.55
Writings	.08½	@	.42
Superfine	.16	@	.26
Fine	.15	@	.18
Books, S. & S. C.	.07¼	@	.12
Books, M. F.	.07¼	@	.09½
Books, coated	.09	@	.15
Label	.09	@	.13
News, sheets	4.75	@	6.00
News, rolls	4.50	@	5.75
Manilas—			
No. 1 Manila	6.00	@	7.00
No. 1 Fiber	.06½	@	.07
No. 1 Jute	9.00	@	10.50
Kraft Wrapping	.07	@	—
Common Bogus	3.50	@	3.85

Boards

(Per Ton Destination)

Chip	$45.00	@	47.50
News, Vat Lined	47.50	@	50.00
Wood, Vat Lined	55.00	@	60.00
Filled News Board	$50.00		
Solid News Board, No. 4 Finish	65.00	@	70.00
S. Manila Chip	62.50	@	70.00
Pat. Coated News	82.50	@	90.00

Old Papers

Mixed paper	.75	@	.77½
Folded news	.95	@	.97½
Soft white shavings	3.00	@	3.15
Hard white shavings	3.75	@	4.00
Kraft paper	2.05	@	2.15
Ledger and letter	2.15	@	2.35
No. 1 books and magazines	1.60	@	1.70
Manila paper No. 1	1.75	@	1.80
Solid ledgers	2.50	@	2.75
No. 1 roofing rags	3.00	@	3.15
No. 2 roofing rags	2.80	@	3.00
No. 3 gunny bagging	1.15	@	1.20
No. 4 Brussels and hard back carpets	1.60	@	1.70
No. 5 roofing rags—			
A's	2.00	@	2.15
B's		@	
C's		@	
No. 6 City dump rags	—	@	—
Manila rope, domestic	.06	@	.06½
Mixed strings	1.10	@	1.20
Jute strings	1.30	@	1.40

TORONTO

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.11	@	.12½
Light tinted	.12	@	.13½
Dark Tinted	.13½	@	.15
Ledgers (sulphite)	—	@	.13
Writing	.09½	@	.12
News, f. o. b. Mills—			
Rolls (carloads)	3.75	@	—
Sheets (carloads)	—	@	4.50
Sheets (2 tons or over)	—	@	4.75
Book—			
No. 1 M. F. (carloads)	9.00	@	—
No. 2 M. F. (carloads)	8.00	@	—
No. 3 M. F. (carloads)	7.50	@	—
No. 1 S. C. (carloads)	9.50	@	—
No. 2 S. C. (carloads)	8.50	@	—
No. 1 Coated and litho	14.50	@	—
No. 2 Coated and litho	13.50	@	—
No. 3 Coated and litho	12.75	@	—
Wrapping—			
Rag Brown	4.75	@	—
White Rap	5.25	@	—
"B" Manila	5.50	@	—
No. 1 Manila	6.50	@	—
Fiber	6.50	@	—
Kraft, M. F.	7.00	@	—
M. G.	7.15	@	—

Pulp

(F. o. b. Mill)

Ground wood	$35.00	@	38.00
Sulphite easy bleaching	55.00	@	63.00
Sulphite news grade	52.00	@	55.00
Sulphite, bleached	76.00	@	80.00
Sulphate	60.00	@	62.00

Old Waste Papers

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut	3.65	@	3.80
Soft White Book shavings	3.20	@	3.30
White Blk. News	2.15	@	2.20
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.60	@	—
Light and Crumpled Book Stock	1.45	@	—
Ledgers and Writings	2.00	@	—
Solid Ledgers	2.00	@	—
Manilas—			
New Manila Cut	—	@	2.00
Printed Manilas	1.55	@	—
Kraft	2.05	@	—
News and Scrap—			
Strictly Overissue	.90	@	—
Folded News	.90	@	—
No. 1 Mixed Papers	—	@	.75

Domestic Rags—
Price to mills, f. o. b. Toronto

	Per lb.		
No. 1 White shirt cuttings	.12¼	@	.13
No. 2 White shirt cuttings	.06½	@	.07
Fancy shirt cuttings	.06¼	@	.06½
No. 1 Old Whites		@	
Third and blues	.03¼	@	.03½
	Per cwt.		
Black stockings	.03	@	—
Roofing stock:			
No. 1	—	@	—
No. 2	—	@	—
Manila rope	.06¾	@	.06½
No. 2	1.35	@	—
Gunny Bagging	.01¾	@	—